

CHAPTER 4

POINT AND NONPOINT SOURCE CHARACTERIZATION OF THE OCOEE RIVER WATERSHED

4.1 Background.

4.2. Characterization of HUC-11 Subwatersheds

4.2.A. 06020003050

4.2.B. 06020003070

4.2.C. 06020003100

4.2.D. 06020003110

4.2.E. 06020003120

4.2.F. 06020003130

4.1 BACKGROUND. This chapter is organized by HUC-11 subwatershed, and the description of each subwatershed is divided into four parts:

- i. General description of the subwatershed
- ii. Description of point source contributions
 - ii.a. Description of facilities discharging to water bodies listed on the 1998 303(d) list
- iii. Description of nonpoint source contributions

Information for this chapter was obtained from databases maintained by the Division of Water Pollution Control or provided in the WCS (Watershed Characterization System) data set. The WCS used was version 1.1 beta (developed by Tetra Tech, Inc for EPA Region 4) released in 2000.

WCS integrates with ArcView® v3.1 and Spatial Analyst® v1.1 to analyze user-delineated (sub)watersheds based on hydrologically connected water bodies. Reports are generated by integrating WCS with Microsoft® Word. Land Use/Land Cover information from 1992 MRLC (Multi-Resolution Land Cover) data are calculated based on the proportion of county-based land use/land cover in user-delineated (sub)watersheds. Nonpoint source data in WCS are based on data collected 1992–1998; nonpoint source data were reviewed by Tennessee NRCS staff.

4.2. CHARACTERIZATION OF HUC-11 SUBWATERSHEDS. The Watershed Characterization System (WCS) software and data sets provided by EPA Region 4 were used to characterize each subwatershed in the Ocoee River Watershed. HUC-14 polygons were aggregated to form the HUC-11 boundaries for data analysis.

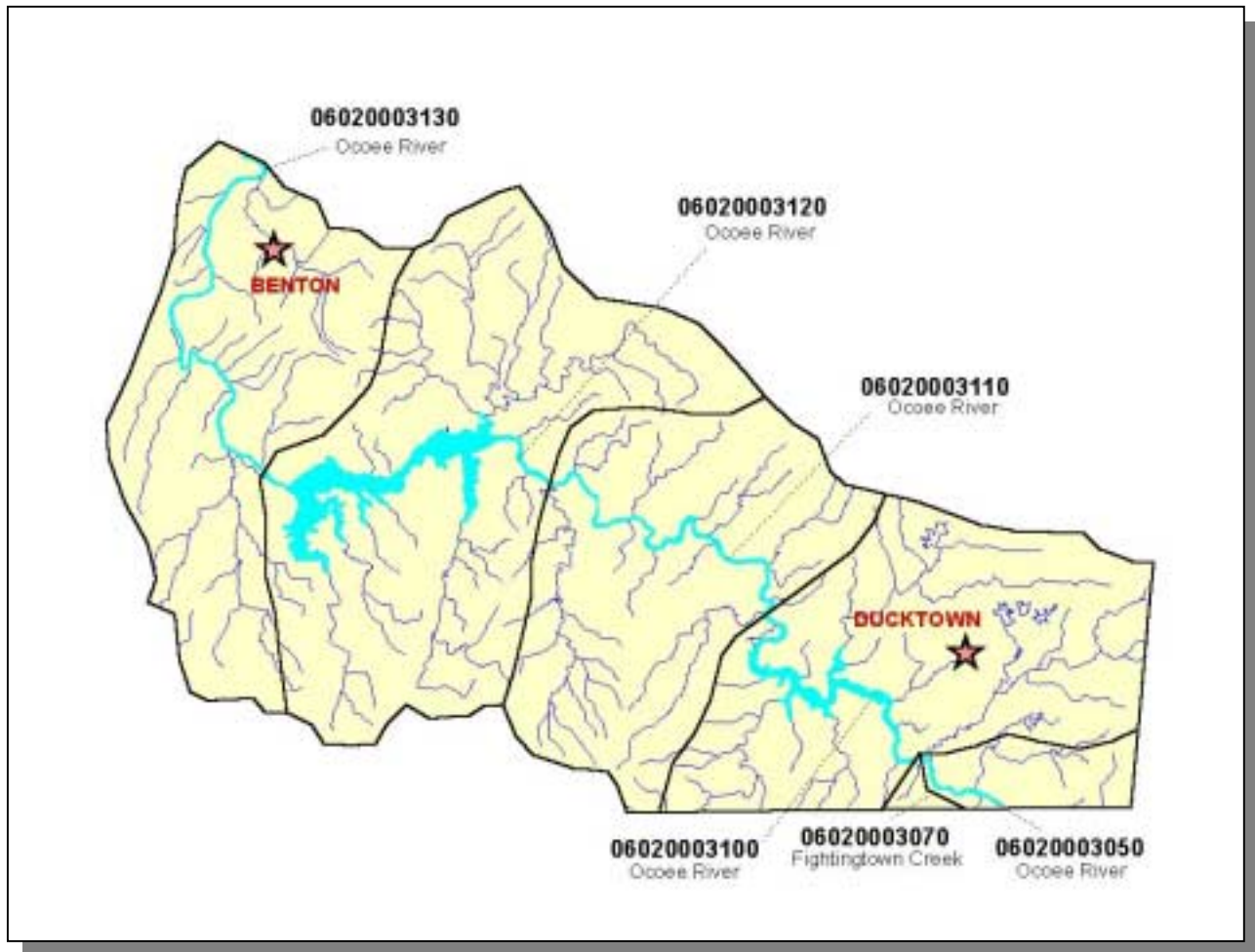


Figure 4-1. The Ocoee River Watershed is Composed of Six USGS-Delineated Subwatersheds (11-Digit Subwatersheds). Locations of Ocoee River, Benton, and Ducktown are shown for reference.

HUC-11	HUC-14
06020003050	06020003020020 (Tacoa River)
06020003070	06020003020030 (Fightingtown Creek)
06020003100	06020003020040 (Belltown Creek) 06020003020050 (North Potato Creek) 06020003020060 (Ocoee River)
06020003110	06020003020070 Ocoee River)
06020003120	06020003020080 Ocoee River)
06020003130	06020003020090 (Fightingtown Creek)

Table 4-1. HUC-14 Drainage Areas are Nested Within HUC-11 Drainages. USGS delineated the HUC-11 drainage areas. NRCS inventories and manages the physical database for HUC-14 drainage areas.

4.2.A. 06020003050.

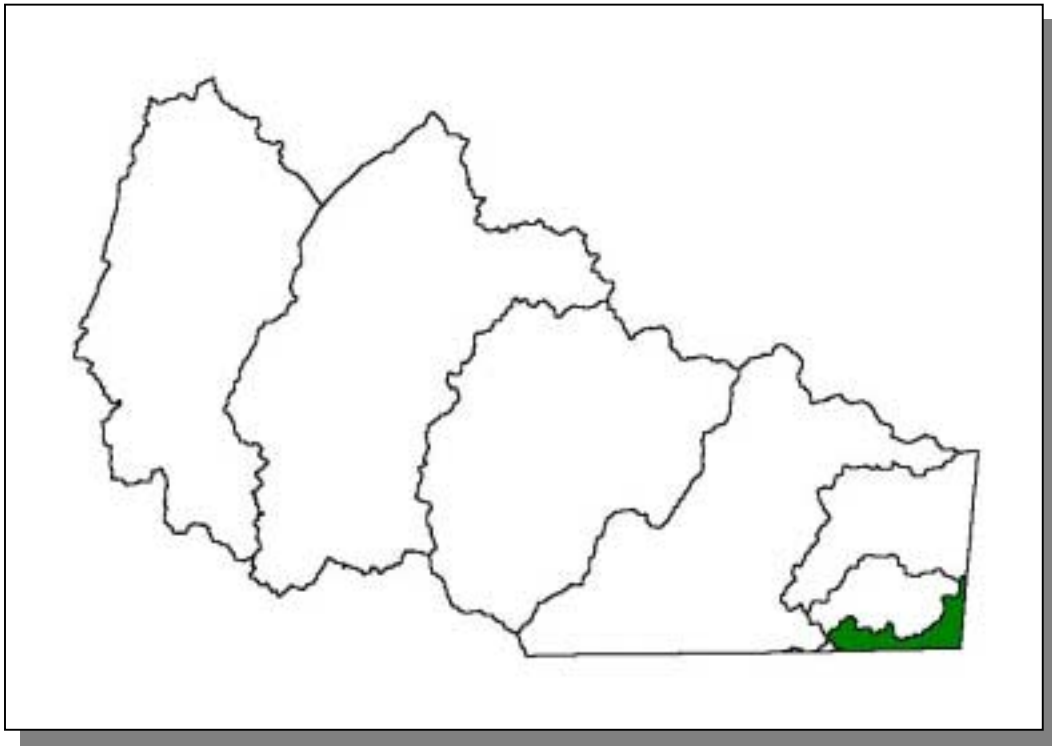


Figure 4-2. Location of Subwatershed 06020003050. All Ocoee HUC-14 subwatershed boundaries are shown for reference.

4.2.A.i. General Description.

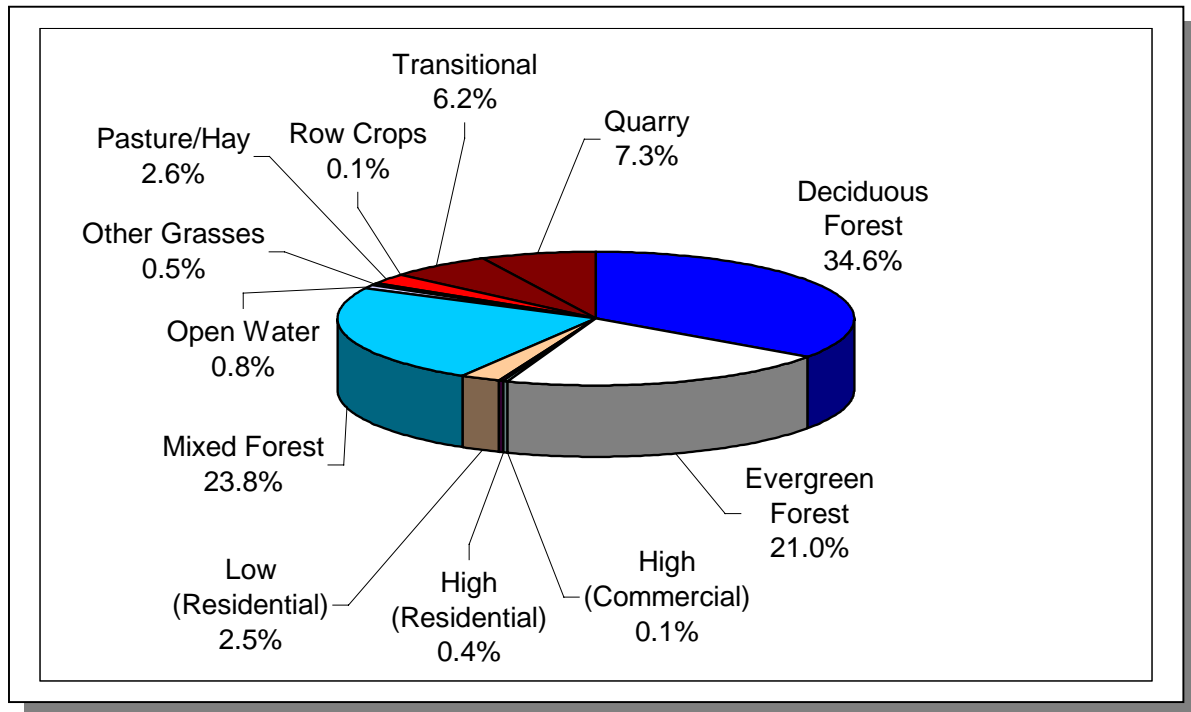


Figure 4-3. Land Use Distribution in Subwatershed 06020003050. More information is provided in Ocoee-Appendix IV.

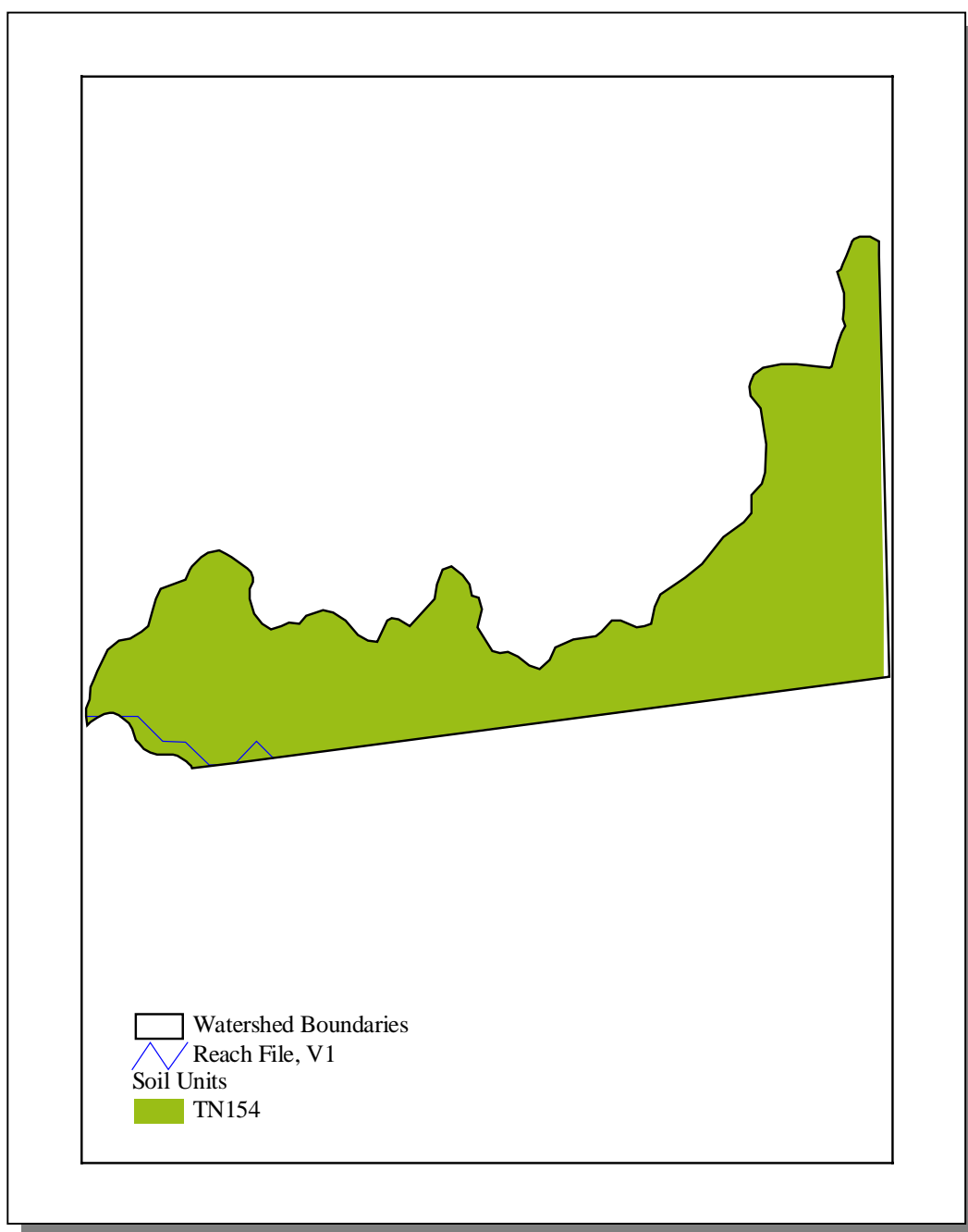


Figure 4-4. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 06020003050.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN154	9.00	B	2.64	4.68	Loam	0.23

Table 4-2. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 06020003050. More details are provided in Ocoee-Appendix IV.

	COUNTY POPULATION			ESTIMATED POPULATION IN WATERSHED		% CHANGE
County	1990	1997 Est.	Portion of Watershed (%)	1990	1997	
Polk	13,643	14,666	0.47	64	69	7.8

Table 4-3. Population Estimates in Subwatershed 06020003050.

NUMBER OF HOUSING UNITS					
Populated Place	County	Population	Total	Public Sewer	Septic Tank
Copperhill	Polk	355	227	198	29

Table 4-4. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 06020003050.

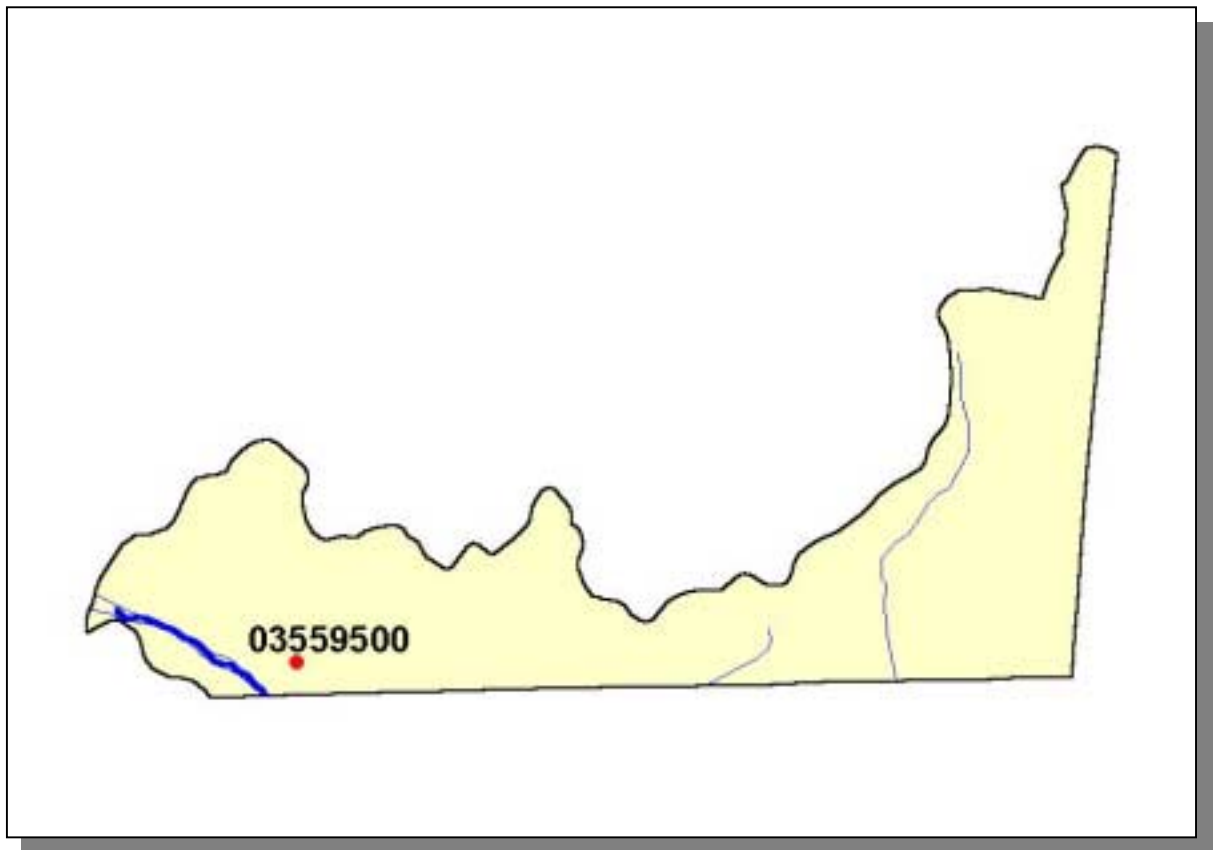


Figure 4-5. Location of Historical Streamflow Data Collection Sites in Subwatershed 06020003050. More information is provided in Ocoee-Appendix IV.

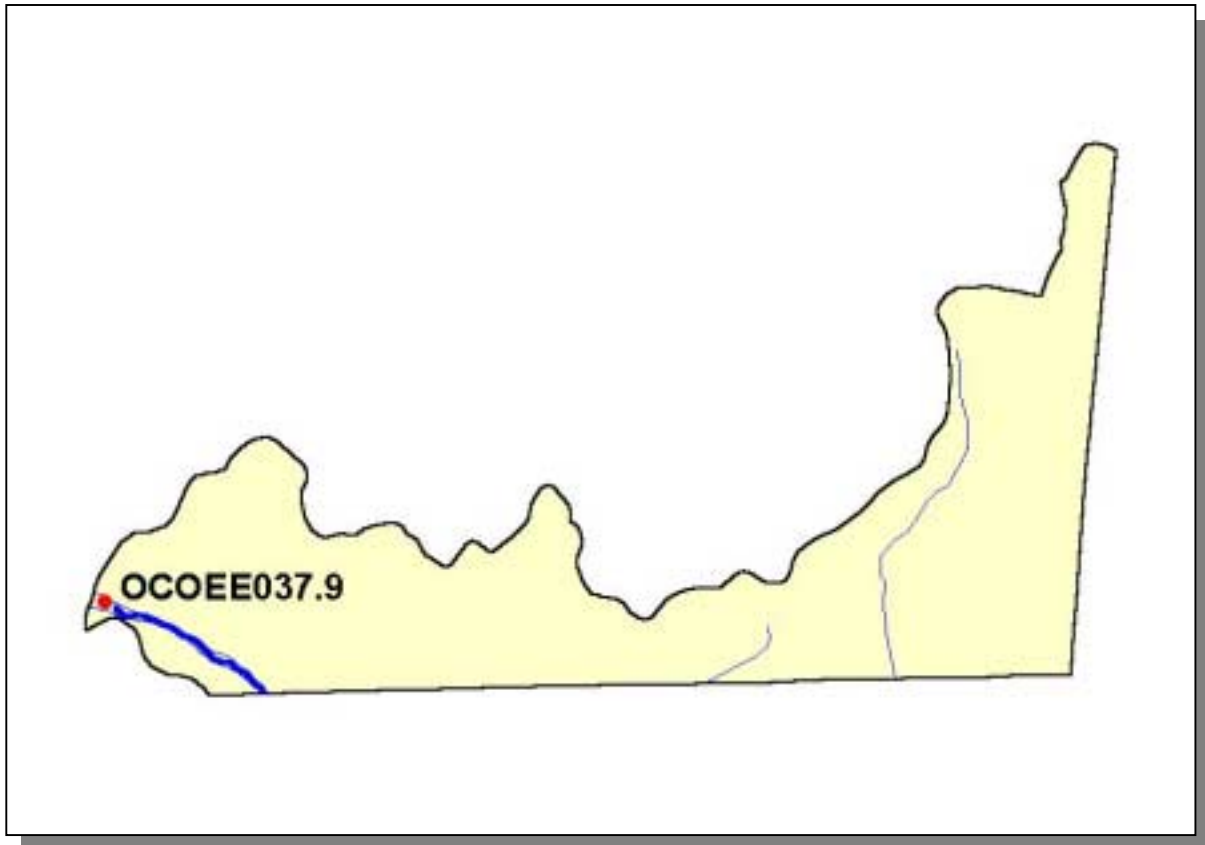


Figure 4-6. Location of STORET Monitoring Sites in Subwatershed 06020003050. More information is provided in Ocoee-Appendix IV.

4.2.A.ii Point Source Contributions.

No Contributions.

4.2.A.iii. Nonpoint Source Contributions.

LIVESTOCK (COUNTS)				
Beef Cow	Cattle	Milk Cow	Chickens	Chickens Sold
5	17	5	169	19,166

Table 4-5. Summary of Livestock Count Estimates in Subwatershed 06020003050.
According to the Census of Agriculture, "Cattle" includes heifers, heifer calves, steers, bulls and bull calves.

County	INVENTORY		REMOVAL RATE	
	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Polk	224.7	214.1	6.2	21.1

Table 4-6. Forest Acreage and Annual Removal Rates (1987-1994) in Subwatershed 06020003050.

CROPS	TONS/ACRE/YEAR
Non Agricultural Land Use	0.00
Soybeans (Row Crops)	2.33
Grass (Pastureland)	1.15
Forest Land (Not Grazed)	0.00
Farmsteads and Ranch Headquarters	0.61
Grass, Forbs, Legumes (Mixed Pasture)	1.34
Forest Land (Grazed)	0.00
Fruit (Horticultural)	0.19
Corn (Row Crops)	6.43
Grass (Hayland)	0.22
Legume Grass (Hayland)	0.05
Other Cropland not Planted	2.93

Table 4-7. Annual Estimated Total Soil Loss in Subwatershed 06020003050.

4.2.B. 06020003070.

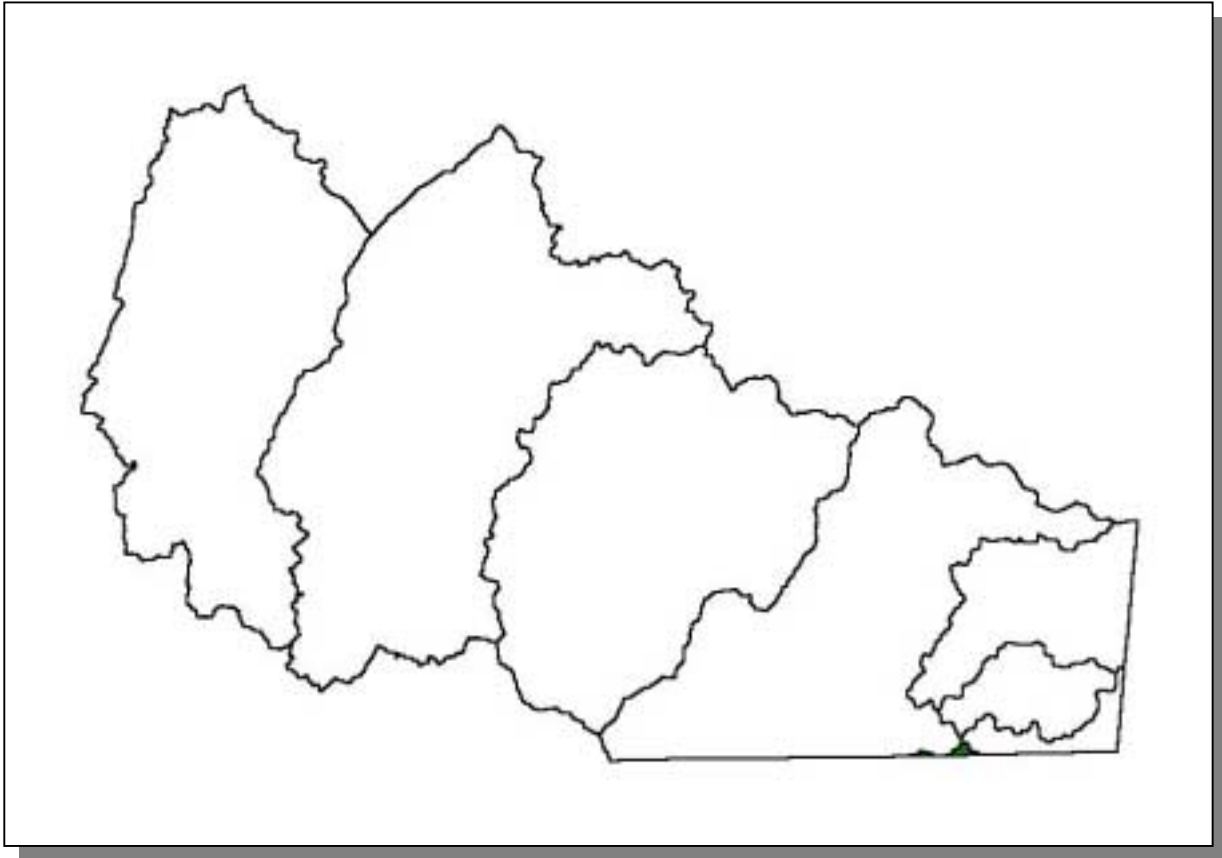


Figure 4-7. Location of Subwatershed 06020003070. All Ocoee HUC-14 subwatershed boundaries are shown for reference.

4.2.B.i. General Description.

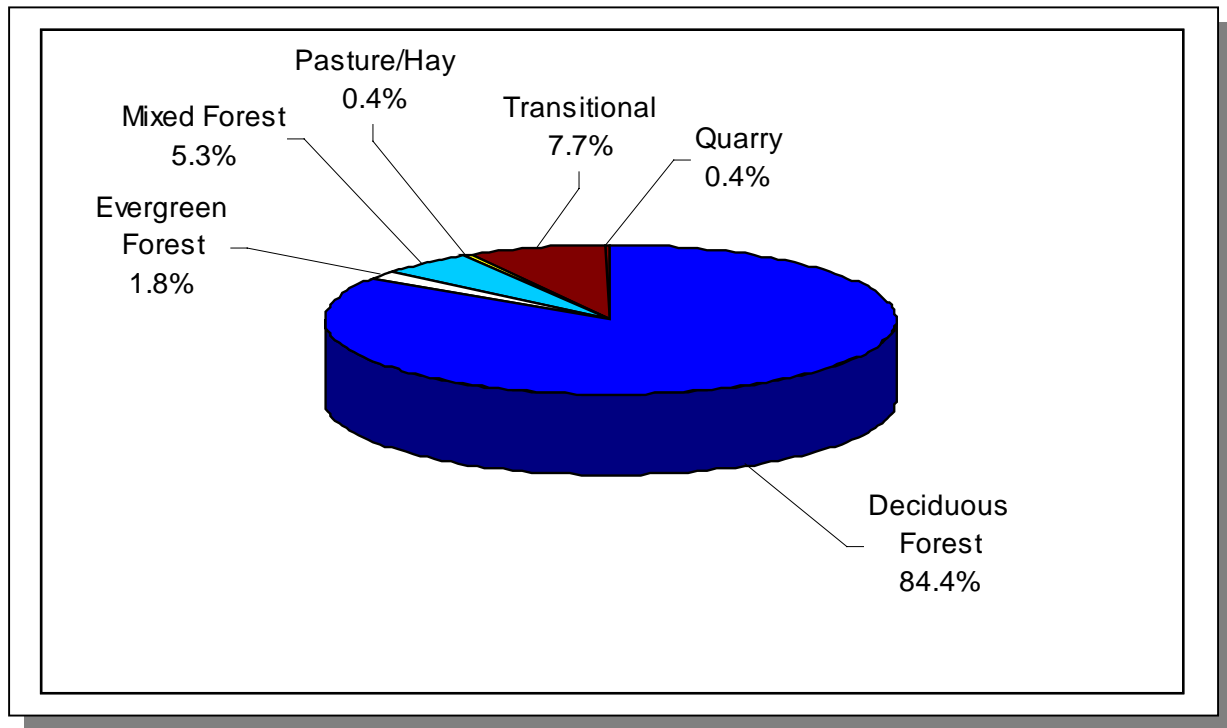


Figure 4-8. Land Use Distribution in Subwatershed 06020003070. More information is provided in Ocoee-Appendix IV.

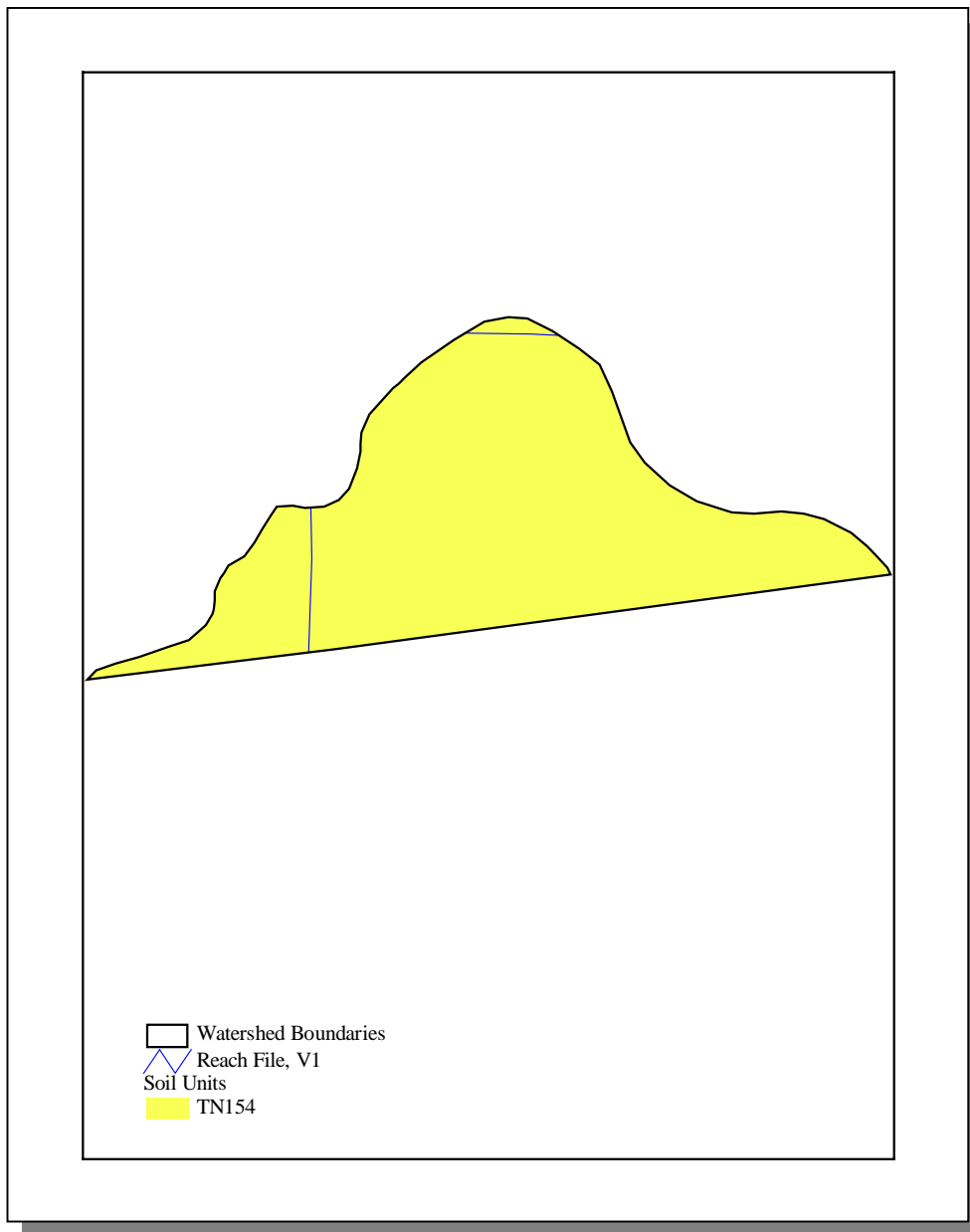


Figure 4-9. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 06020003070.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN154	9.00	B	2.64	4.66	Loam	0.23

Table 4-8. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 06020003070. More information is provided in Ocoee-Appendix IV.

	COUNTY POPULATION			ESTIMATED POPULATION IN WATERSHED		% CHANGE
County	1990	1997 Est.	Portion of Watershed (%)	1990	1997	
Polk	13,643	14,666	0.01	2	2	0.0

Table 4-9. Population Estimates in Subwatershed 06020003070.

4.2.B.ii. Point Source Contributions.

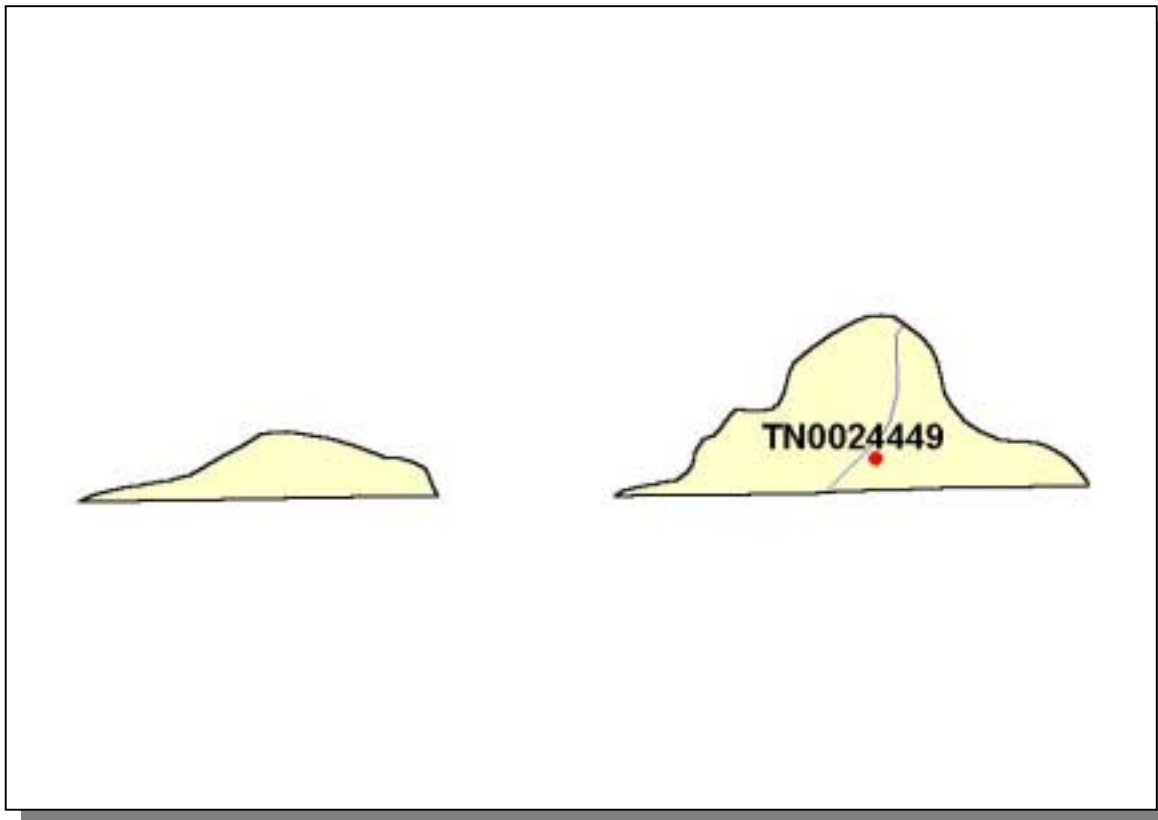


Figure 4-10. Location of Active Point Source Facilities (Individual Permits) in Subwatershed 06020003070. More information, including the names of facilities, is provided in Ocoee-Appendix IV.

4.2.B.ii.a. Dischargers to Waterbodies Listed on the 1998 303(d) List.

There is one NPDES facility discharging to water bodies listed on the 1998 303(d) list in Subwatershed 06020003070:

- TN0024449 discharges to Ocoee River @ RM 37.0

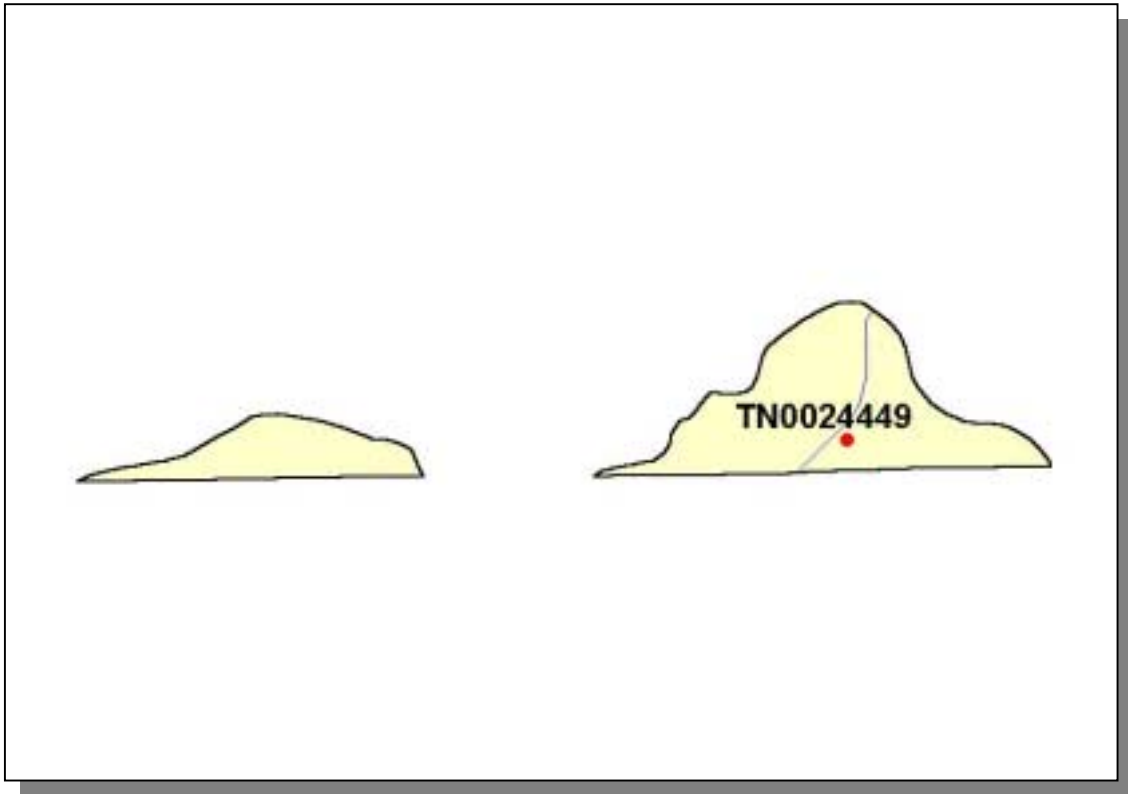


Figure 4-11. Location of NPDES Dischargers to Water Bodies Listed on the 1998 303(d) List in Subwatershed 06020003070. The names of facilities are provided in Ocoee-Appendix IV.

PERMIT #	7Q10	1Q20	30Q2	QDESIGN	QLTA
TN0024449	110	77.6	447.0	0.7	0.308

Table 4-10. Receiving Stream Flow Information for NPDES Dischargers to Waterbodies Listed on the 1998 303(d) List in Subwatershed 06020003070. Data are in million gallons per day (MGD). 30Q2 data were calculated using data in Flow Duration and Low Flows of Tennessee Streams Through 1992.

PERMIT #	CBOD ₅	FECAL
TN0024449	X	X

Table 4-11. Monitoring Requirements for NPDES Dischargers to Waterbodies Listed on the 1998 303(d) List in Subwatershed 06020003070.

PERMIT #	TSS	BOD	BYPASS
TN0024449	32	3	12

Table 4-12. Number of Permit Violations Based on DMR Data (01/1997-06/2000) for NPDES Dischargers to Waterbodies Listed on the 1998 303(d) List in Subwatershed 06020003070.

4.2.B.iii. Nonpoint Source Contributions.

LIVESTOCK (COUNTS)
Chickens Sold
115

Table 4-13. Summary of Livestock Count Estimates in Subwatershed 06020003070.

County	INVENTORY		REMOVAL RATE	
	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Polk	224.7	214.1	6.2	21.1

Table 4-14. Forest Acreage and Average Annual Removal Rates (1987-1994) in Subwatershed 06020003070.

CROPS	TONS/ACRE/YEAR
Non Agricultural Land Use	0.00
Soybeans (Row Crops)	2.33
Grass (Pastureland)	1.15
Forest Land (Not Grazed)	0.00
Farmsteads and Ranch Headquarters	0.61
Grass, Forbs, Legumes (Mixed Pasture)	1.34
Forest Land (Grazed)	0.00
Fruit (Horticultural)	0.19
Corn (Row Crops)	6.43
Grass (Hayland)	0.22
Legume Grass (Hayland)	0.05
Other Cropland not Planted	2.93

Table 4-15. Annual Estimated Total Soil Loss in Subwatershed 06020003070.

4.2.C. 06020003100.

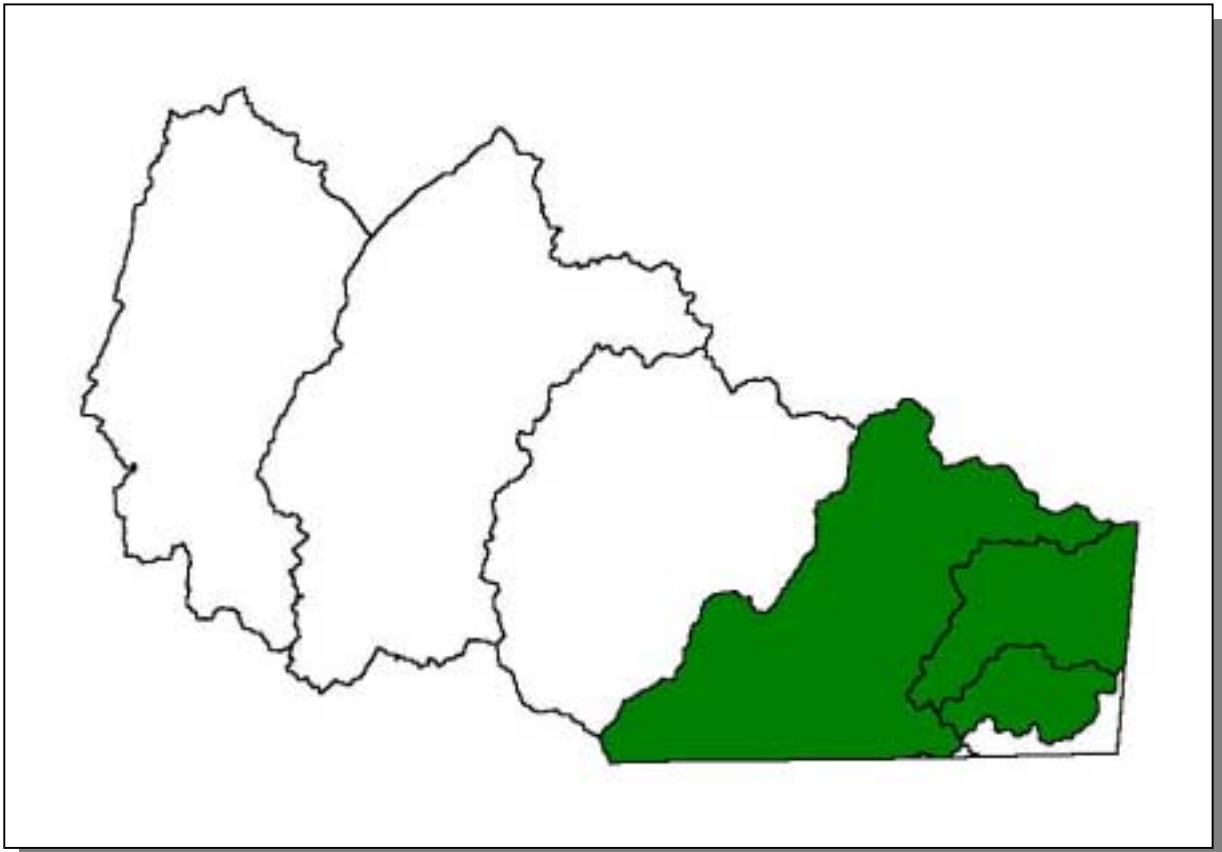


Figure 4-12. Location of Subwatershed 06020003100. All Ocoee HUC-14 subwatershed boundaries are shown for reference.

4.2.C.i. General Description.

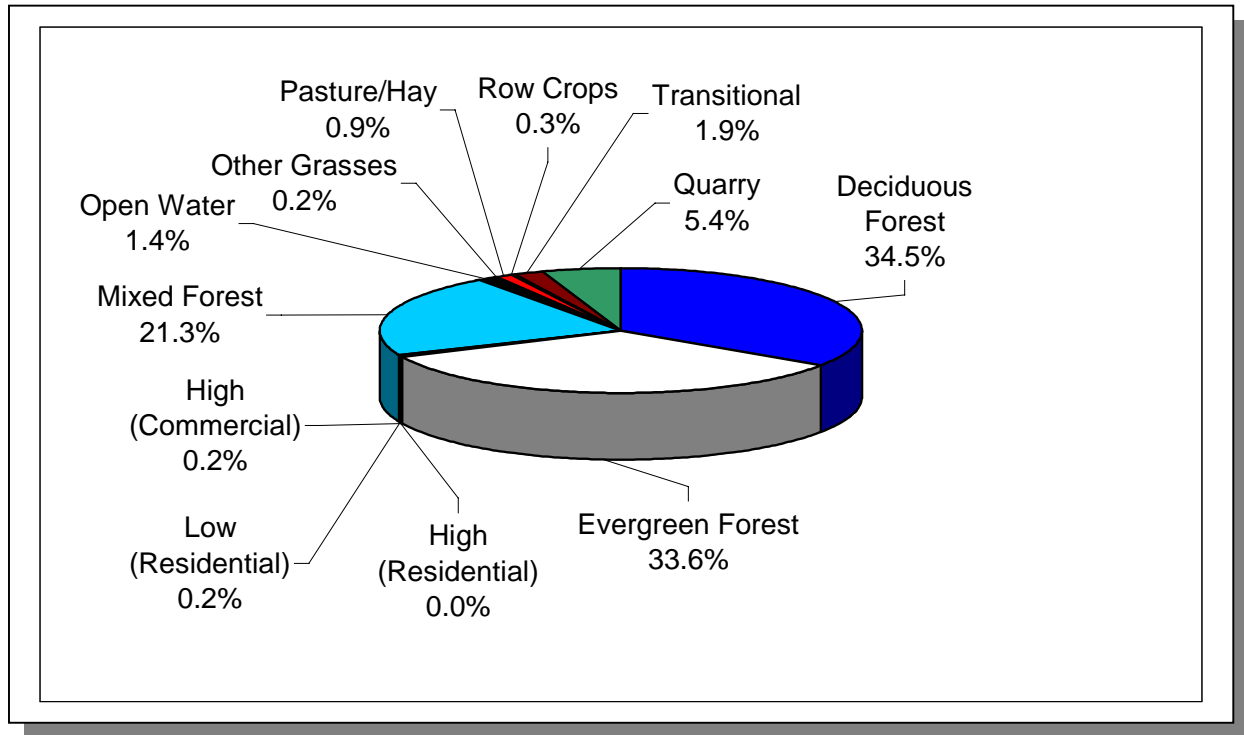


Figure 4-13. Land Use Distribution in Subwatershed 06020003100. More information is provided in Ocoee-Appendix IV.

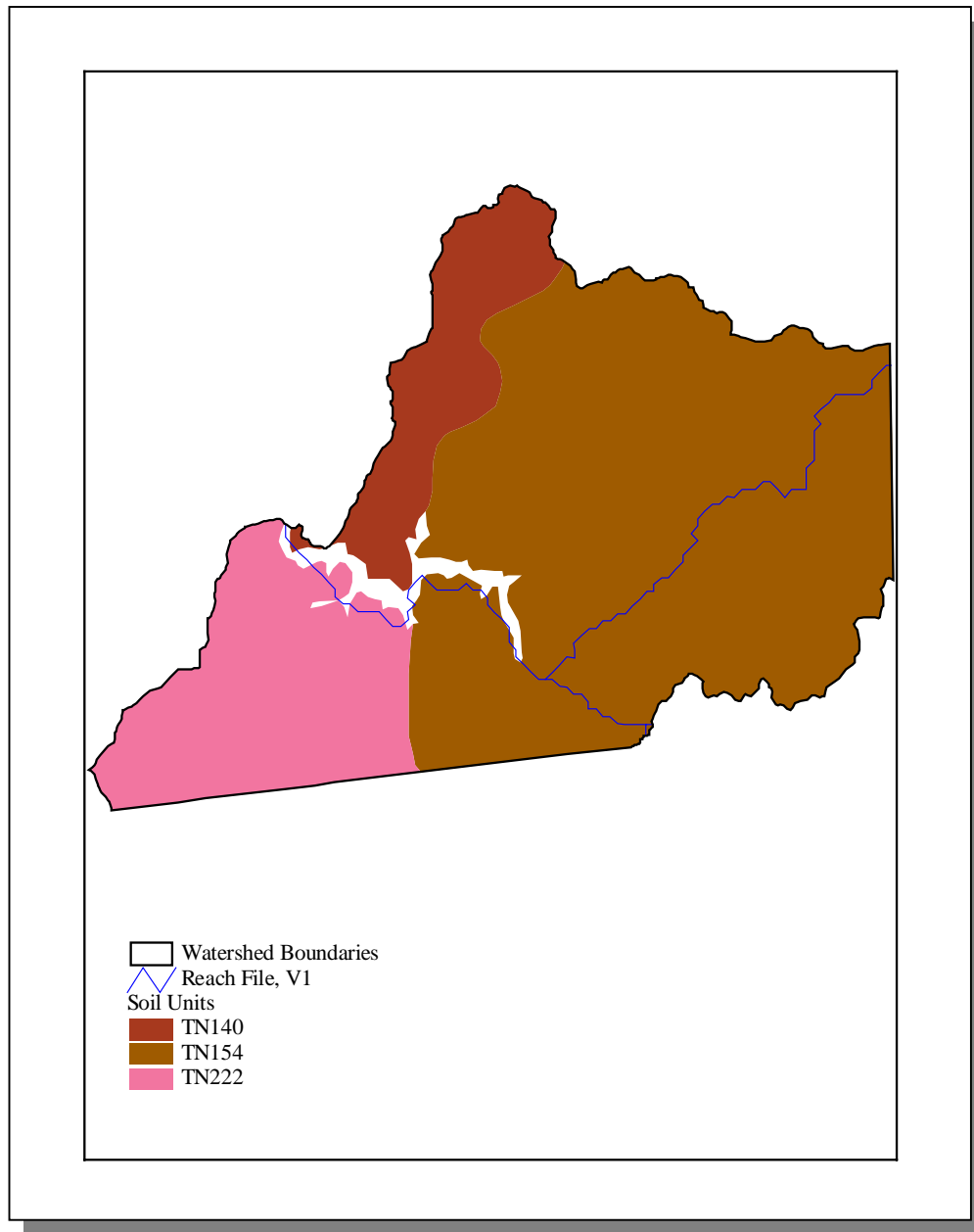


Figure 4-14. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 06020003100.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN140	0.00	B	3.85	4.85	Sandy Loam	0.21
TN154	9.00	B	2.64	4.66	Loam	0.23
TN222	0.00	B	3.96	5.32	Sandy Loam	0.23

Table 4-16. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 06020003100. More information is provided in Ocoee-Appendix IV.

	COUNTY POPULATION			ESTIMATED POPULATION IN WATERSHED		% CHANGE
County	1990	1997 Est.	Portion of Watershed (%)	1990	1997	
Polk	13,643	14,666	12.18	1,662	1,787	7.5

Table 4-17. Population Estimates in Subwatershed 06020003100.

Populated Place	County	Population	NUMBER OF HOUSING UNITS			
			Total	Public Sewer	Septic Tank	Other
Copperhill	Polk	355	227	198	29	0
Ducktown	Polk	412	215	115	91	9
Totals		767	442	313	120	9

Table 4-18. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 06020003100.

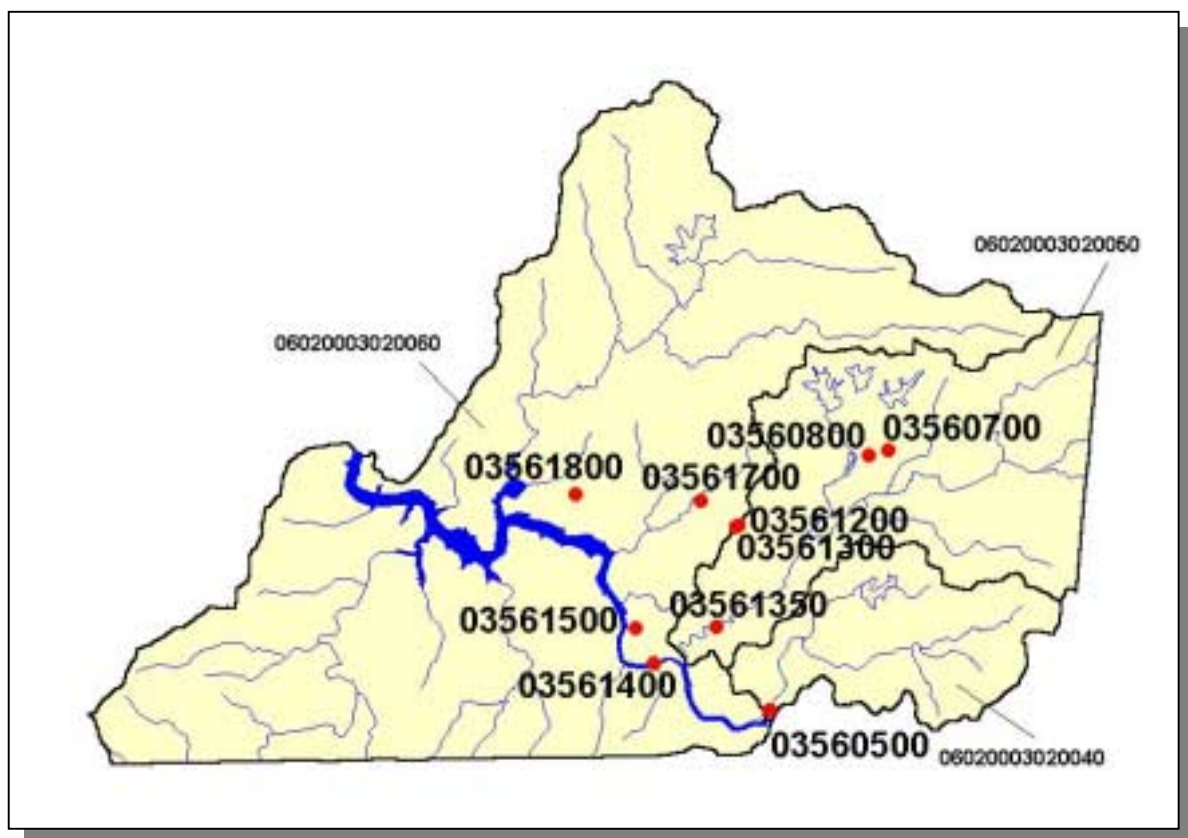


Figure 4-15. Location of Historical Streamflow Data Collection Sites in Subwatershed 06020003100. Subwatershed 06020003020040, 06020003020050, and 06020003020060 boundaries are shown for reference. More information is provided in Ocoee-Appendix IV.

4.2.C.ii. Point Source Contributions.



Figure 4-16. Location of Active Point Source Facilities (Individual Permits) in Subwatershed 06020003100. Subwatershed 06020003020040, 06020003020050, and 06020003020060 boundaries are shown for reference. More information, including the names of facilities, is provided in Ocoee-Appendix IV.

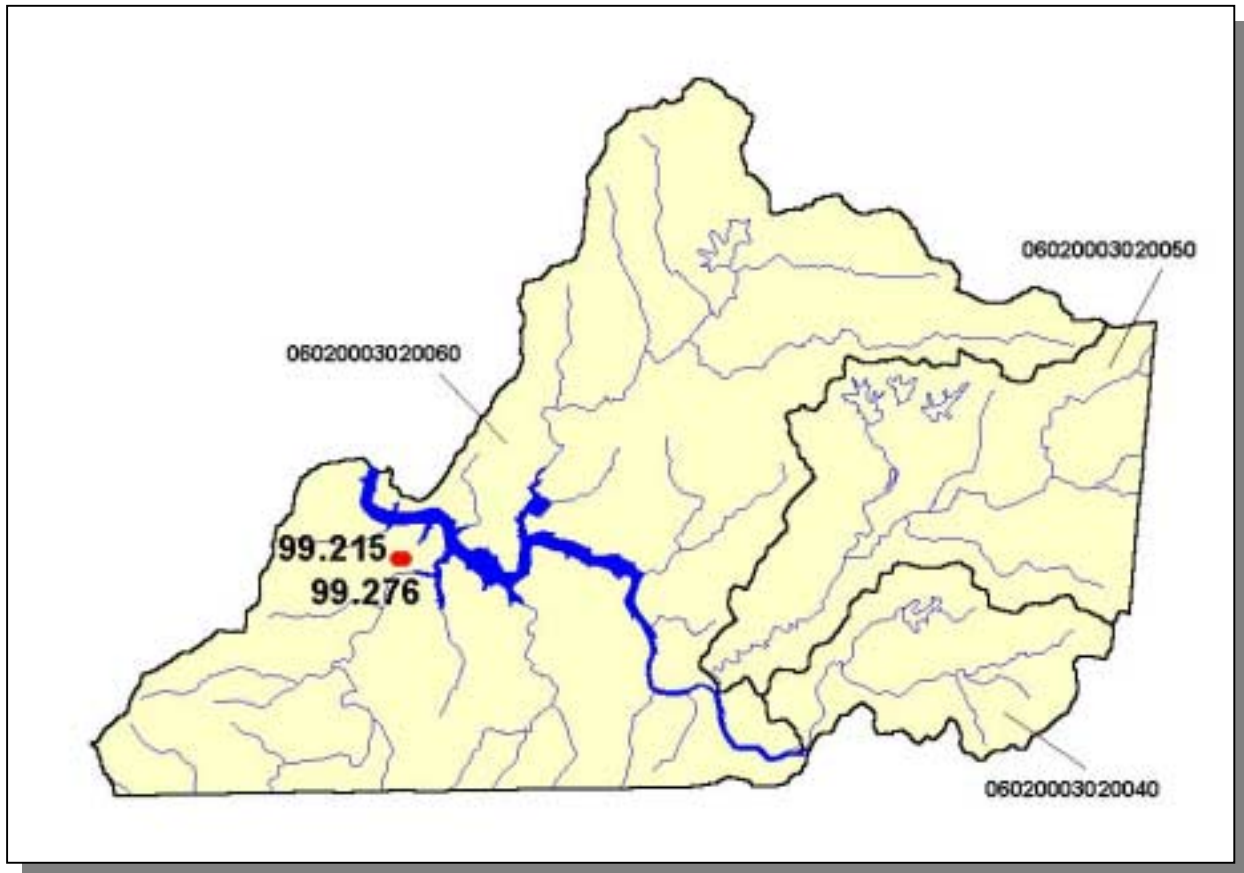


Figure 4-17. Location of ARAP Sites (Individual Permits) in Subwatershed 06020003100. Subwatershed 06020003020040, 06020003020050, and 06020003020060 boundaries are shown for reference. More information is provided in Ocoee-Appendix IV.

4.2.C.ii.a. Dischargers to Waterbodies Listed on the 1998 303(d) List.

There are two NPDES facilities discharging to water bodies listed on the 1998 303(d) list in Subwatershed 06020003100:

- TN0056413 discharges to Mile 0.5 of a Wet Weather Conveyance to Central Mine Branch @ RM 0.5
- TN0002411 discharges to Ocoee River @ RM 37.1 and to Davis Mill Creek



Figure 4-18. Location of NPDES Dischargers to Water Bodies Listed on the 1998 303(d) List in Subwatershed 06020003100. Subwatershed 06020003020040, 06020003020050, and 06020003020060 boundaries are shown for reference. The names of facilities are provided in Ocoee-Appendix IV.

PERMIT #	7Q10	1Q20	30Q2	QDESIGN	QLTA
TN0002411	0	0	0		31.05
TN0056413	0	0	0	0.02	0.0052
TN0059358	71.0	0	0	0.14	

Table 4-19. Receiving Stream Flow Information for NPDES Dischargers to Waterbodies Listed on the 1998 303(d) List in Subwatershed 06020003100. Data are in million gallons per day (MGD). 30Q2 data were calculated using data in Flow Duration and Low Flows of Tennessee Streams Through 1992.

PERMIT #	CBOD ₅	FECAL	NH ₃	PH	TSS	COD
TN0002411				X	X	X
TN0056413	X	X	X	X	X	
TN0059358	X	X				

Table 4-20a. Inorganic Monitoring Requirements for NPDES Dischargers to Waterbodies Listed on the 1998 303(d) List in Subwatershed 06020003100.

PERMIT #	DIMETHYLANALINE	SURFACTANTS	OIL and GREASE
TN0002411	X	X	X

Table 4-20b. Organic Monitoring Requirements for NPDES Dischargers to Waterbodies Listed on the 1998 303(d) List in Subwatershed 06020003100.

PERMIT #	Cu	Zn	Cr	Pb	Fe	Ni
TN0002411	X	X	X	X	X	X

Table 4-21. Parameters Monitored for Daily Maximum (mg/L) Limits for NPDES Dischargers to Waterbodies Listed on the 1998 303(d) List in Subwatershed 06020003100.

PERMIT #	Cu	Zn	Fe	pH	SS	SETTLEABLE SOLIDS	Fecal	CBOD
TN0002411	34	6	1	80				
TN0059358				24	16	1	16	1

Table 4-22. Number of Permit Violations Based on DMR Data (04/1993-12/1999) for NPDES Dischargers to Waterbodies Listed on the 1998 303(d) List in Subwatershed 06020003100.

4.2.C.iii. Nonpoint Source Contributions.

LIVESTOCK (COUNTS)				
Beef Cow	Cattle	Milk Cow	Chickens	Chickens Sold
43	163	43	38	151,032

Table 4-23. Summary of Livestock Count Estimates in Subwatershed 06020003100. According to the Census of Agriculture, "Cattle" includes heifers, heifer calves, steers, bulls and bull calves.

County	INVENTORY		REMOVAL RATE	
	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Polk	224.7	214.1	6.2	21.1

Table 4-24. Forest Acreage and Average Annual Removal Rates (1987-1994) in Subwatershed 06020003100.

CROPS	TONS/ACRE/YEAR
Non Agricultural Land Use	0.00
Soybeans (Row Crops)	2.33
Grass (Pastureland)	1.15
Forest Land (Not Grazed)	0.00
Farmsteads and Ranch Headquarters	0.61
Grass, Forbs, Legumes (Mixed Pasture)	1.34
Forest Land (Grazed)	0.00
Fruit (Horticultural)	0.19
Corn (Row Crops)	6.43
Grass (Hayland)	0.22
Legume Grass (Hayland)	0.05
Other Cropland not Planted	2.93

Table 4-25. Annual Estimated Total Soil Loss in Subwatershed 06020003110.

4.2.D. 06020003110.

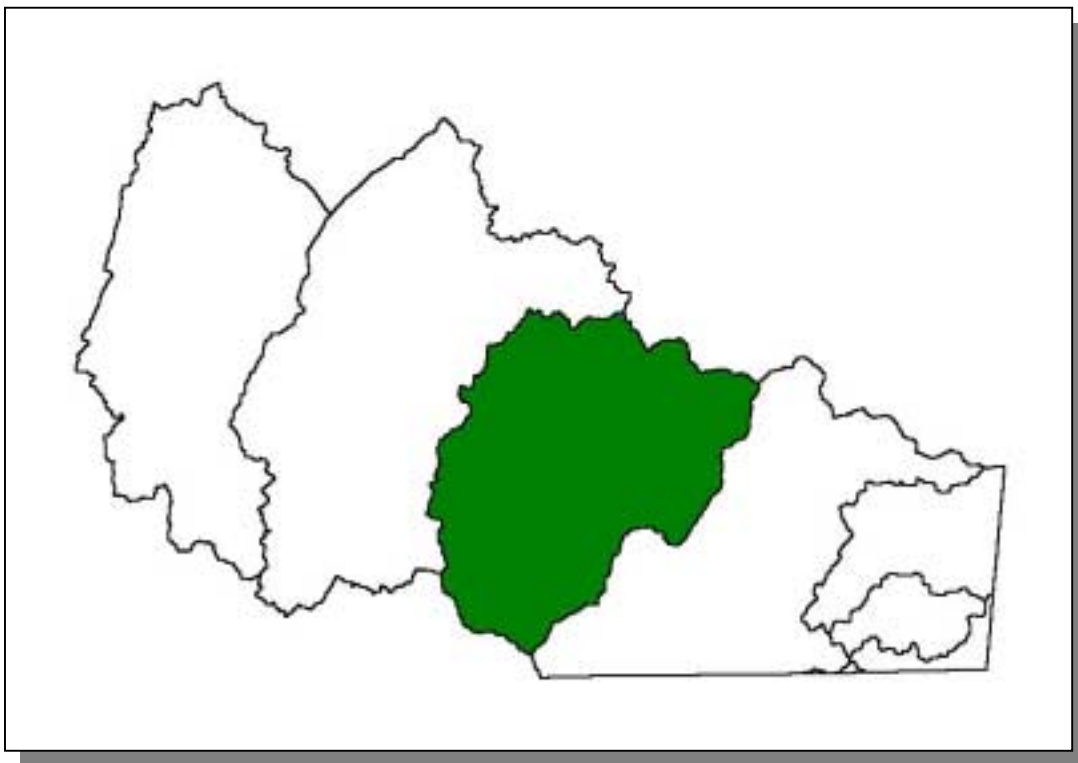


Figure 4-19. Location of Subwatershed 06020003110. All Ocoee HUC-14 subwatershed boundaries are shown for reference.

4.2.D.i. General Description.

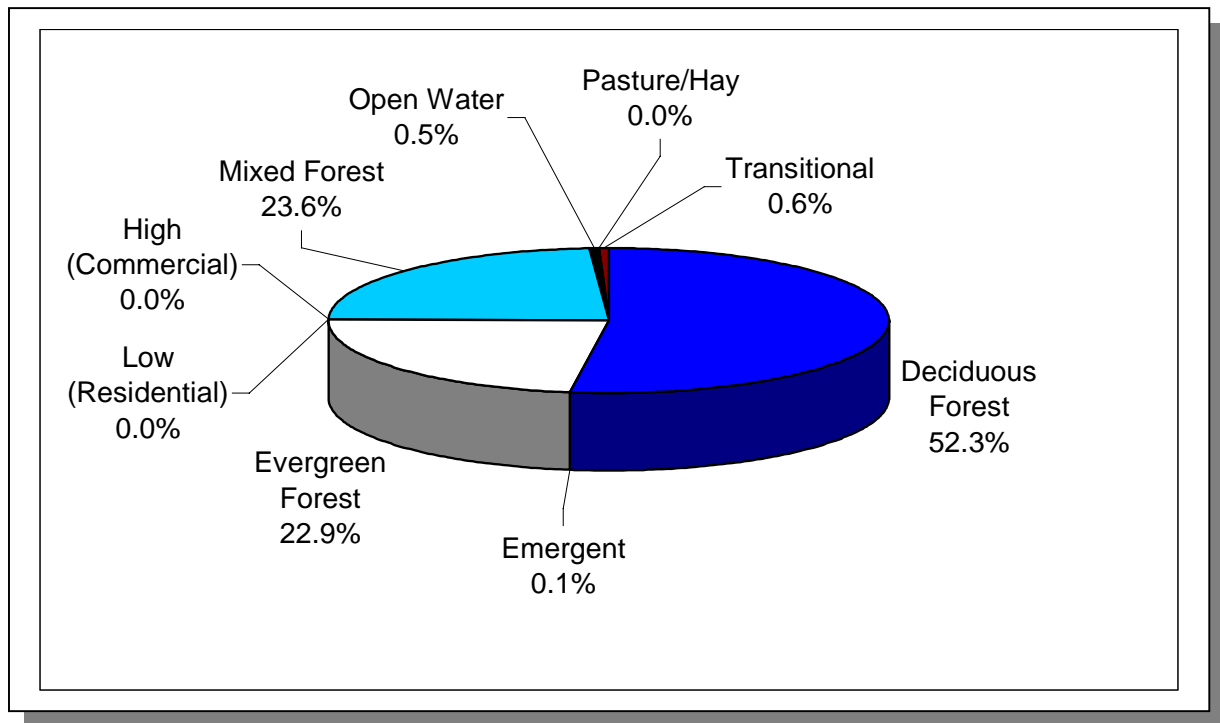


Figure 4-20. Land Use Distribution in Subwatershed 06020003110. More information is provided in Ocoee-Appendix IV.

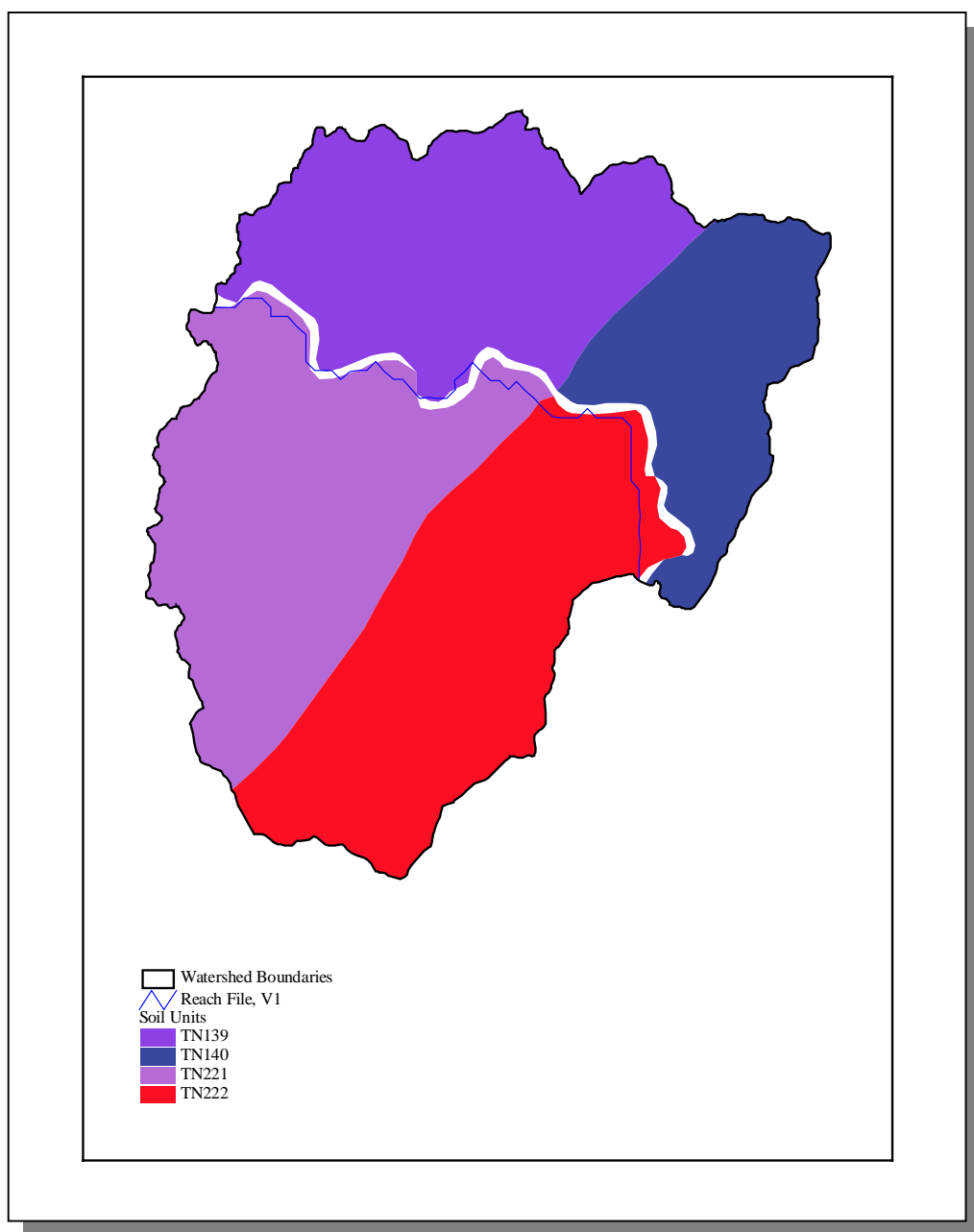


Figure 4-21. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 06020003110.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN139	0.00	C	11.84	4.82	Loam	0.20
TN140	0.00	B	3.85	4.85	Sandy Loam	0.21
TN221	0.00	B	3.60	5.33	Sandy Loam	0.24
TN222	0.00	B	3.96	5.32	Sandy Loam	0.23

Table 4-26. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 06020003110. More information is provided in Ocoee-Appendix IV.

	COUNTY POPULATION			ESTIMATED POPULATION IN WATERSHED		% CHANGE
County	1990	1997 Est.	Portion of Watershed (%)	1990	1997	
Polk	13,643	14,666	10.0	1,365	1,467	7.5

Table 4-27. Population estimates in Subwatershed 06020003110.



Figure 4-22. Location of Historical Streamflow Data Collection Sites in Subwatershed 06020003110. More information is provided in Ocoee-Appendix IV.

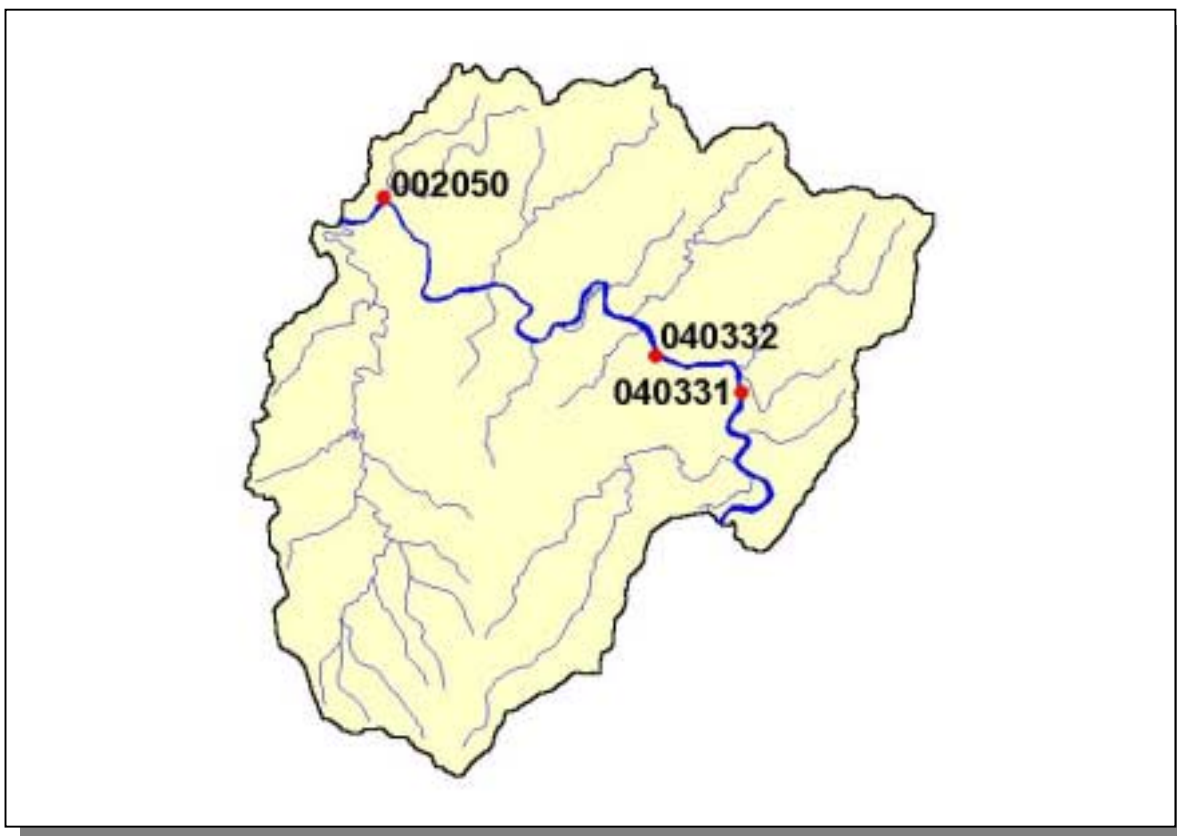


Figure 4-23. Location of STORET Monitoring Sites in Subwatershed 06020003110. More information is provided in Ocoee-Appendix IV.

4.2.D.ii. Point Source Contributions.



Figure 4-24. Location of Active Point Source Facilities (Individual Permits) in Subwatershed 06020003110. More information, including the names of facilities, is provided in Ocoee-Appendix IV.



Figure 4-25. Location of ARAP Sites (Individual Permits) in Subwatershed 06020003110.
More information is provided in Ocoee-Appendix IV.

4.2.D.ii.a. Dischargers to Waterbodies Listed on the 1998 303(d) List.

There are two NPDES facilities discharging to water bodies listed on the 1998 303(d) list in Subwatershed 06020003110:

- TN0027502 discharges to Ocoee River @ RM 19.7
- TN0005479 discharges to Ocoee River @ RM 25.1



Figure 4-26. Location of NPDES Dischargers to Water Bodies Listed on the 1998 303(d) List in Subwatershed 06020003110. The names of facilities are provided in Ocoee-Appendix IV.

PERMIT #	7Q10	1Q20	30Q2	QLTA
TN0005479	0	0	0	0.766
TN0027502	0	0	0	0.15

Table 4-28. Receiving Stream Flow Information for NPDES Dischargers to Waterbodies Listed on the 1998 303(d) List in Subwatershed 06020003110. Data are in million gallons per day (MGD). 30Q2 data were calculated using data in Flow Duration and Low Flows of Tennessee Streams Through 1992.

PERMIT #	METAL
TN0005479	X
TN0027502	X

Table 4-29. Monitoring Requirements for NPDES Dischargers to Waterbodies Listed on the 1998 303(d) List in Subwatershed 06020003110.

PERMIT #	PCB
TN0005479	X

Table 4-30. Parameters Monitored for Daily Maximum (mg/L) Limits for NPDES Dischargers to Waterbodies Listed on the 1998 303(d) List in Subwatershed 06020003110.

4.2.D.iii. Nonpoint Source Contributions.

LIVESTOCK (COUNTS)
Chickens Sold
229

Table 4-31. Summary of Livestock Count Estimates in Subwatershed 06020003110.

County	INVENTORY		REMOVAL RATE	
	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Polk	224.7	214.1	6.2	21.1

Table 4-32. Forest Acreage and Average Annual Removal Rates (1987-1994) in Subwatershed 06020003110.

CROPS	TONS/ACRE/YEAR
Non Agricultural Land Use	0.00
Soybeans (Row Crops)	2.33
Grass (Pastureland)	1.15
Forest Land (Not Grazed)	0.00
Farmsteads and Ranch Headquarters	0.61
Grass, Forbs, Legumes (Mixed Pasture)	1.34
Forest Land (Grazed)	0.00
Fruit (Horticultural)	0.19
Corn (Row Crops)	6.43
Grass (Hayland)	0.22
Legume Grass (Hayland)	0.05
Other Cropland not Planted	2.93

Table 4-33. Annual Soil Loss in Subwatershed 06020003110.

4.2.E. 06020003120.

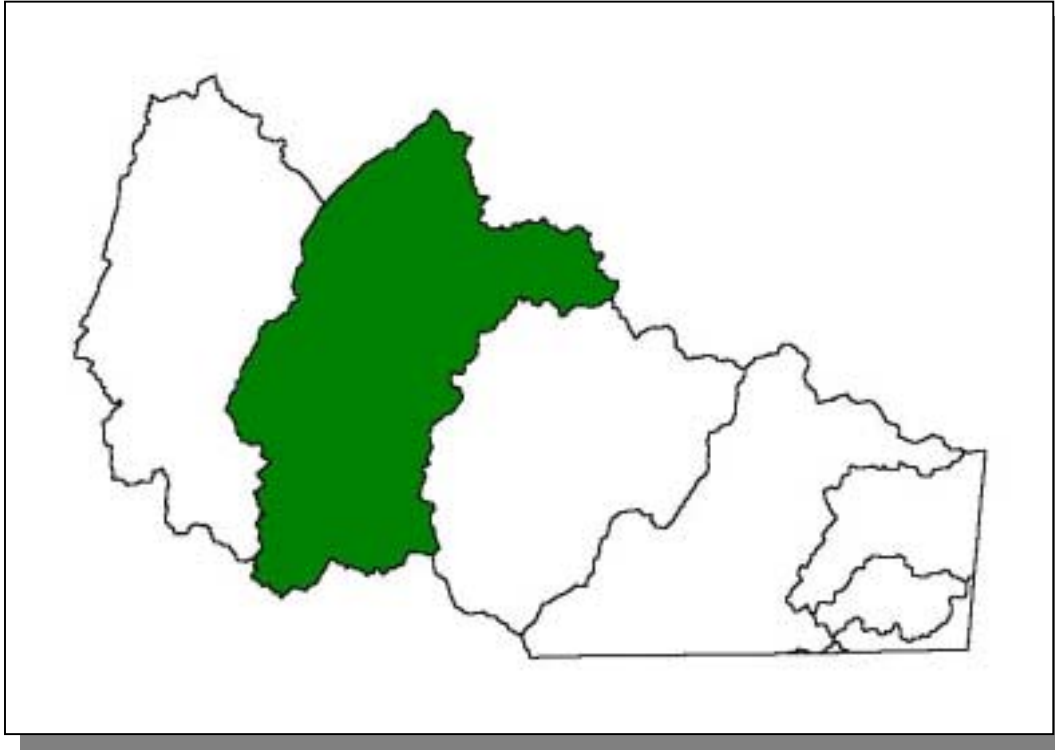


Figure 4-27. Location of Subwatershed 06020003120. All Ocoee HUC-14 subwatershed boundaries are shown for reference.

4.2.E.i. General Description.

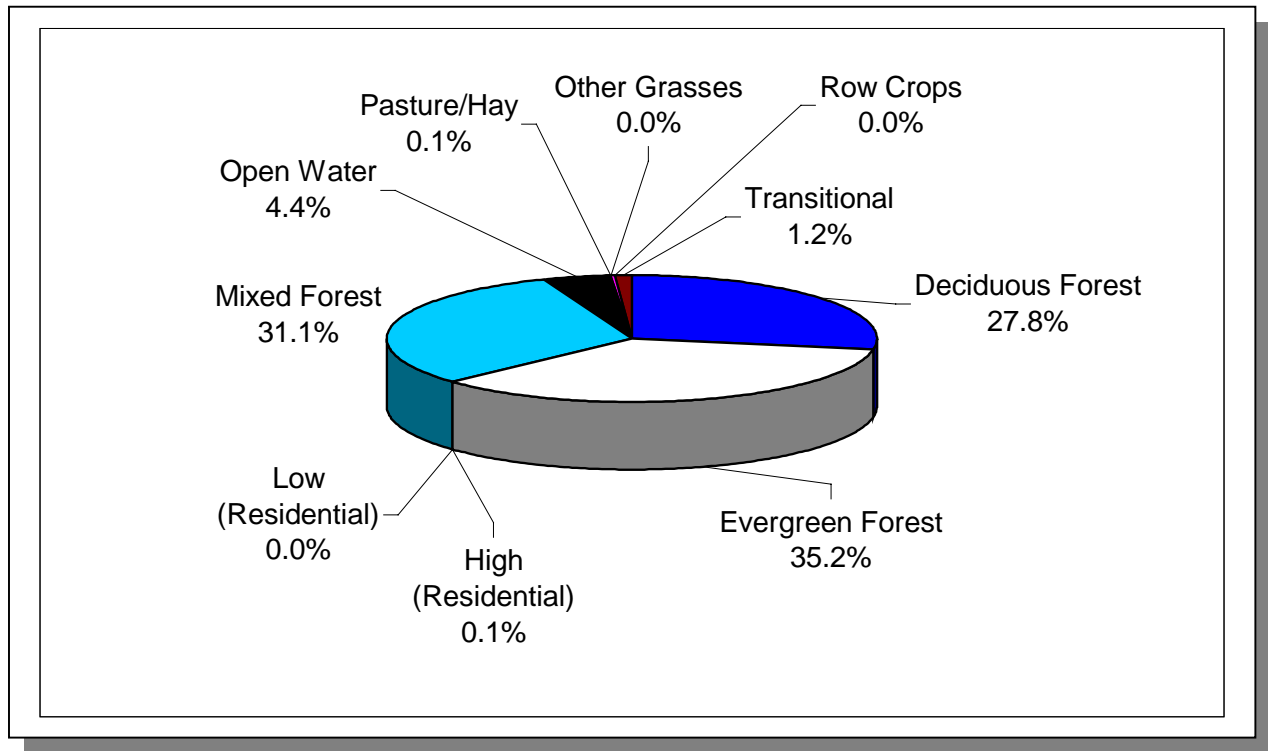


Figure 4-28. Land Use Distribution in Subwatershed 06020003120. More information is provided in Ocoee-Appendix IV.

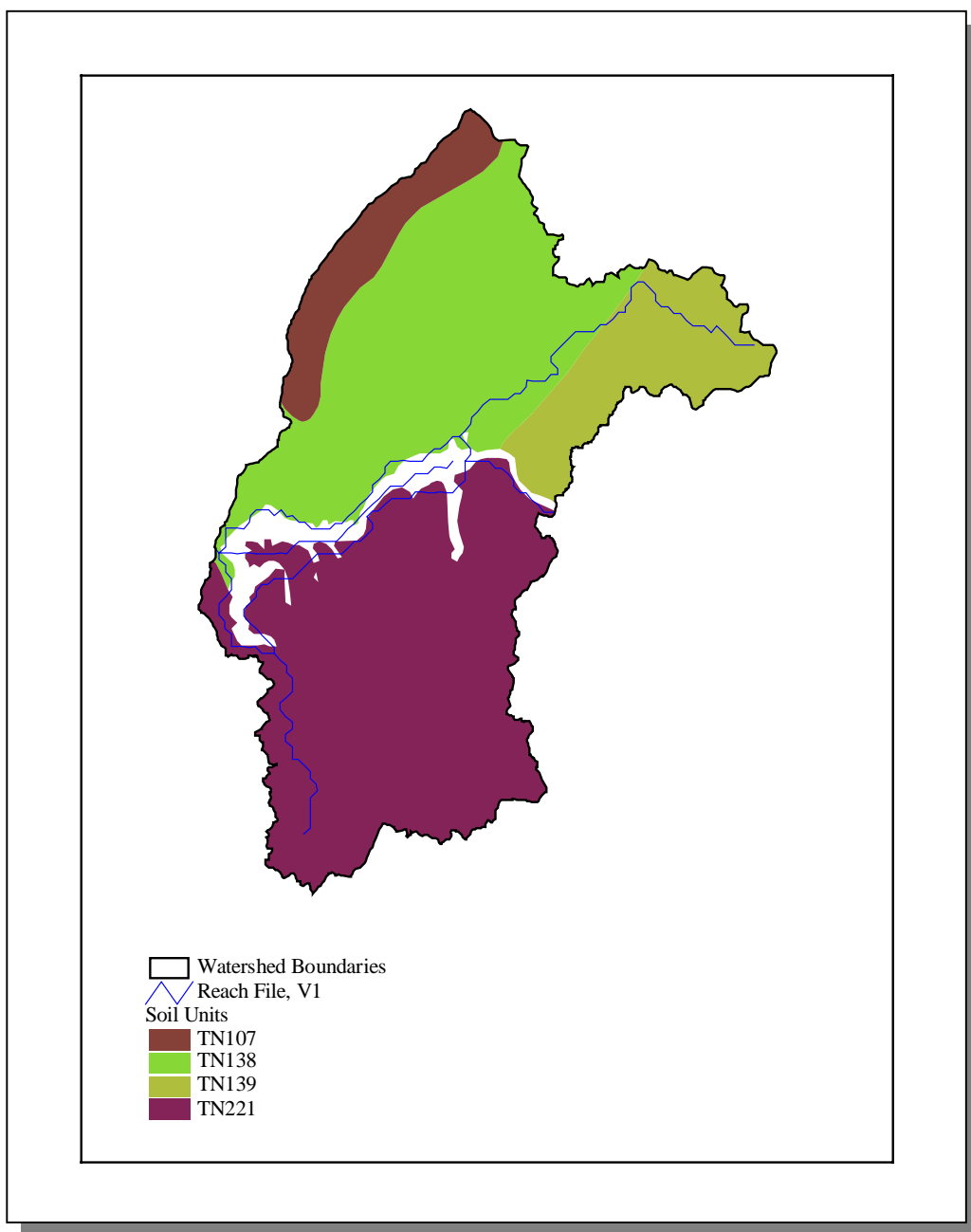


Figure 4-29. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 06020003120.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hr)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN107	1.00	C	6.34	4.84	Loam	0.28
TN138	0.00	C	2.48	4.26	Sandy Loam	0.22
TN139	0.00	C	11.84	4.82	Loam	0.20
TN221	0.00	B	3.60	5.33	Sandy Loam	0.0.24

Table 4-34. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 06020003120. More information is provided in Ocoee-Appendix IV.

County	COUNTY POPULATION		Portion of Watershed (%)	ESTIMATED POPULATION IN WATERSHED		% CHANGE
	1990	1997 Est.		1990	1997	
Polk	13,643	14,666	13.07	1,783	1,917	7.5

Table 4-35. Population Estimates in Subwatershed 06020003120.

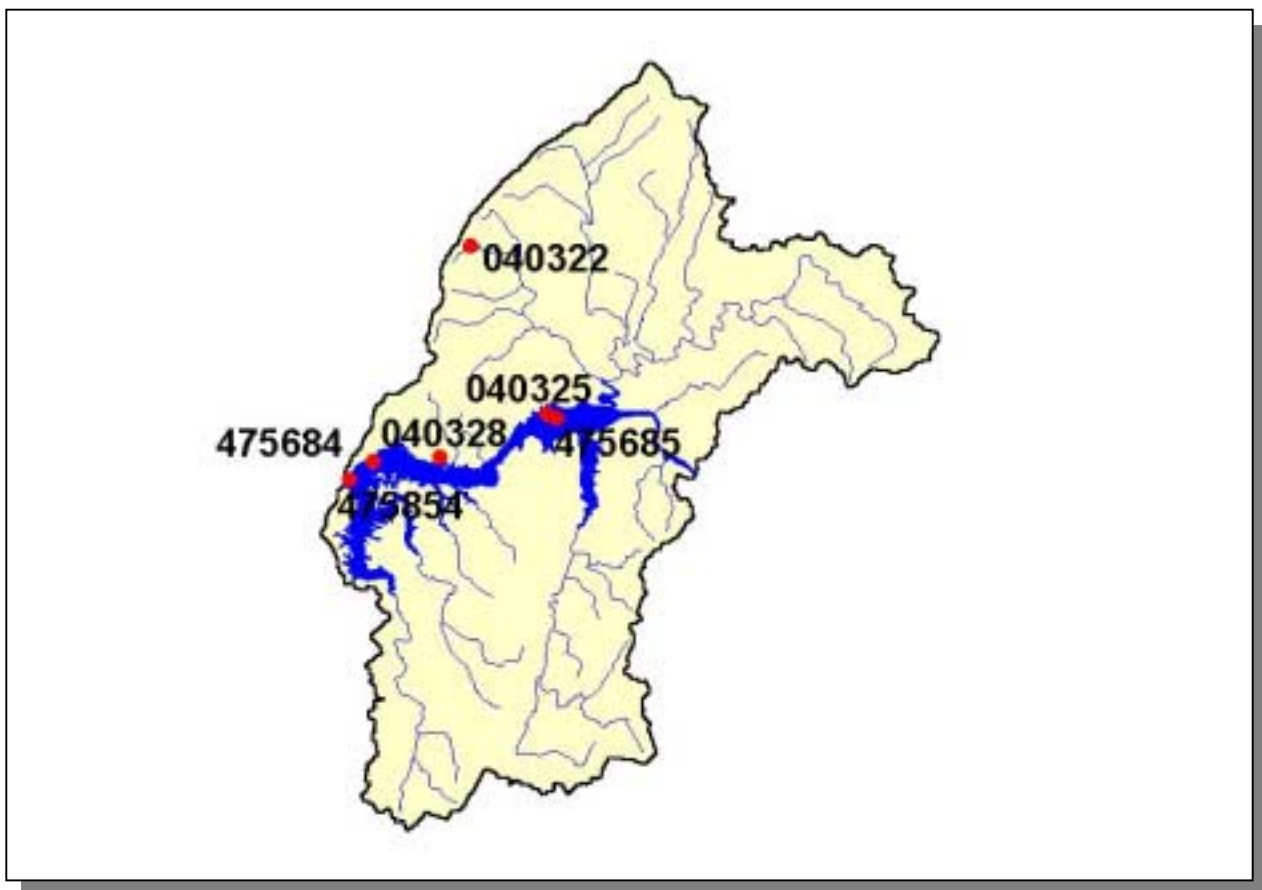


Figure 4-30. Location of STORET Monitoring Sites in Subwatershed 06020003120. More information is provided in Ocoee-Appendix IV.

4.2.E.ii. Point Source Contributions.

No Contributions.

4.2.E.iii. Nonpoint Source Contributions.

LIVESTOCK (COUNTS)			
Beef Cow	Cattle	Milk Cow	Chickens Sold
<5	17	<5	15,806

Table 4-36. Summary of Livestock Count Estimates in Subwatershed 06020003120.
According to the Census of Agriculture, "Cattle" includes heifers, heifer calves, steers, bulls and bull calves.

County	INVENTORY		REMOVAL RATE	
	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Polk	224.7	214.1	6.2	21.1

Table 4-37. Forest Acreage and Annual Removal Rates (1987-1994) in Subwatershed 06020003120.

CROPS	TONS/ACRE/YEAR
Non Agricultural Land Use	0.00
Soybeans (Row Crops)	2.33
Grass (Pastureland)	1.15
Forest Land (Not Grazed)	0.00
Farmsteads and Ranch Headquarters	0.61
Grass, Forbs, Legumes (Mixed Pasture)	1.34
Forest Land (Grazed)	0.00
Fruit (Horticultural)	0.19
Corn (Row Crops)	6.43
Grass (Hayland)	0.22
Legume Grass (Hayland)	0.05
Other Cropland not Planted	2.93

Table 4-38. Annual Estimated Soil Loss in Subwatershed 06020003120.

4.2.F. 06020003130

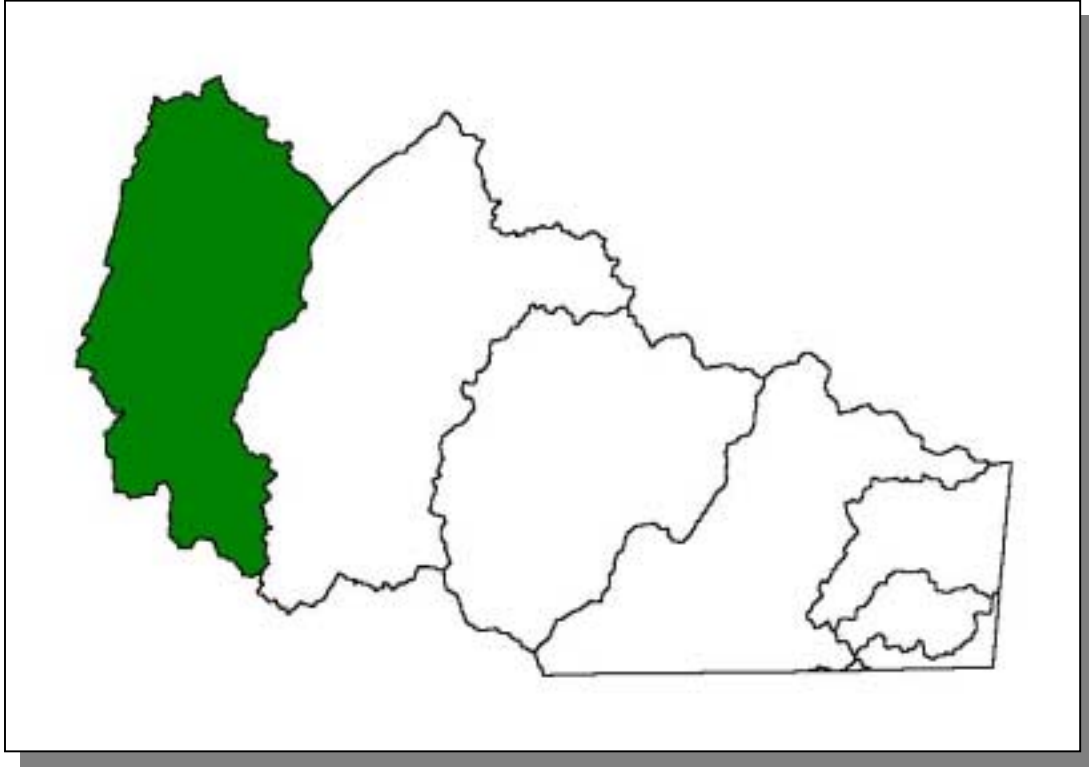


Figure 4-31. Location of Subwatershed 06020003130. All Ocoee HUC-14 subwatershed boundaries are shown for reference.

4.2.F.i. General Description.

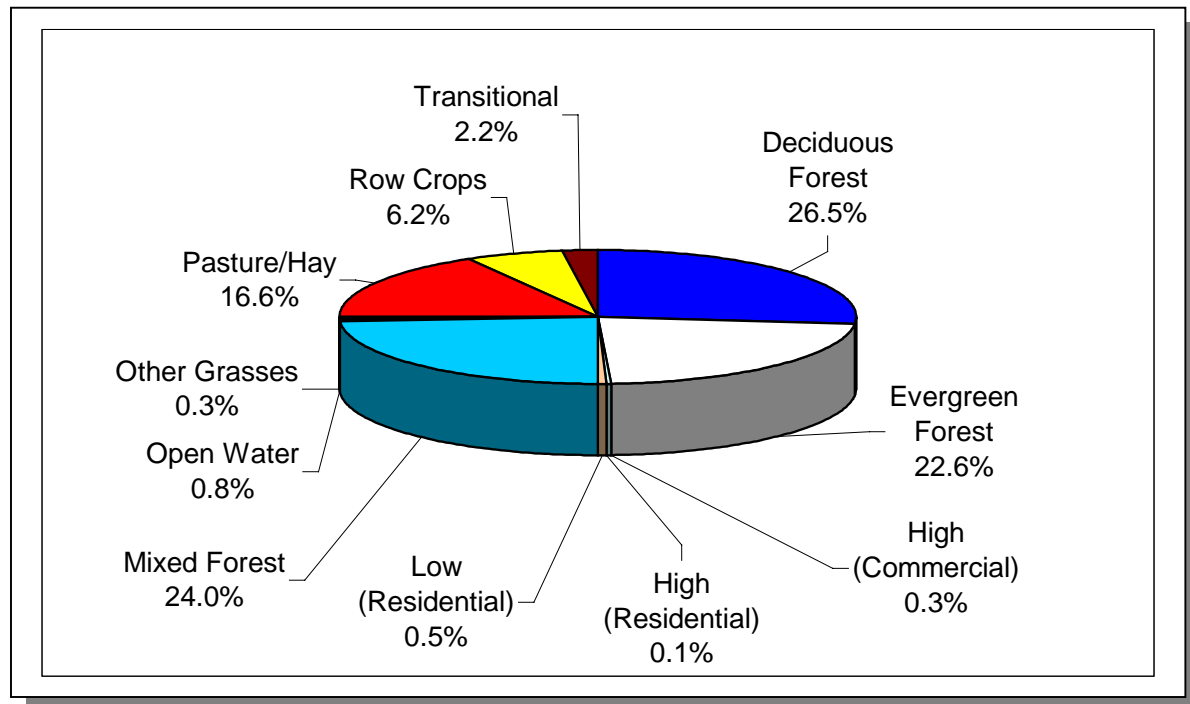


Figure 4-32. Land Use Distribution in Subwatershed 06020003130. More information is provided in Ocoee-Appendix IV.

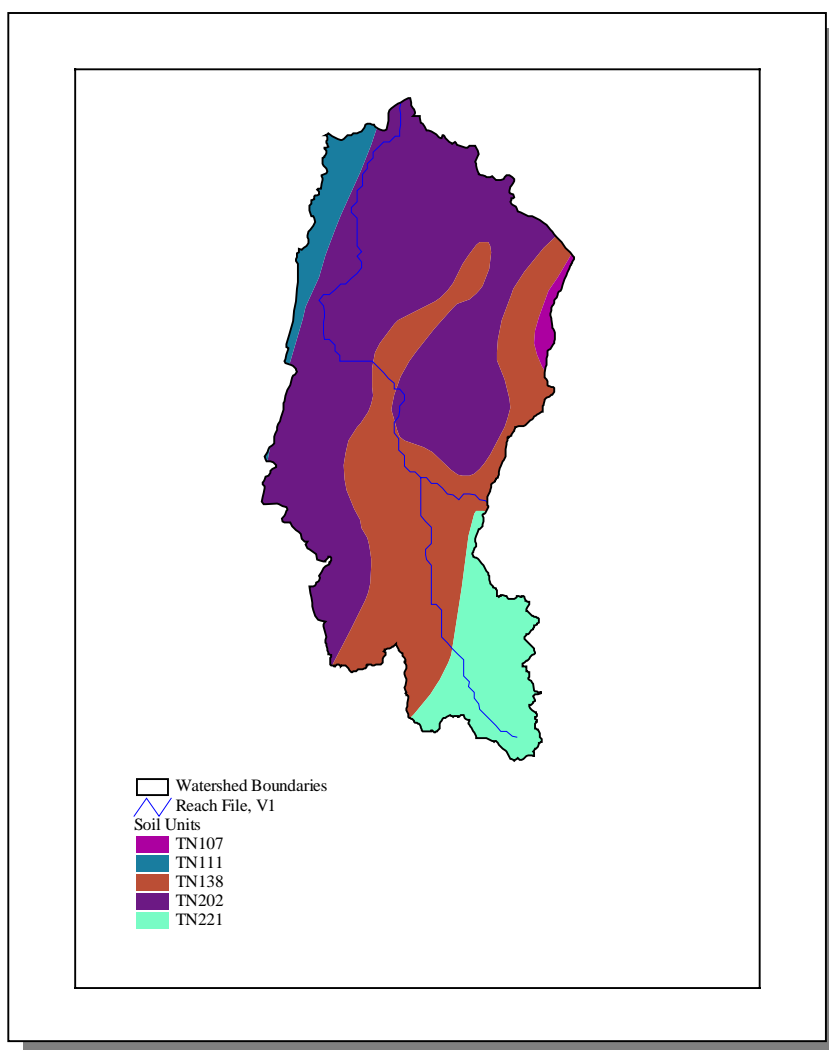


Figure 4-33. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 06020003130.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hr)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN107	1.00	C	6.34	4.84	Loam	0.28
TN111	0.00	C	1.41	5.10	Loam	0.34
TN138	0.00	C	2.48	4.26	Sandy Loam	0.22
TN202	0.00	B	1.30	5.00	Loam	0.33
TN221	0.00	B	3.60	5.33	Sandy Loam	0.24

Table 4-39. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 06020003130. More information is provided in Ocoee-Appendix IV.

	TOTAL COUNTY POPULATION			ESTIMATED POPULATION IN WATERSHED		PERCENT CHANGE
	1990	1997 Est.		1990	1997	
County			Portion of Watershed (%)			
Bradley	73,712	80,800	0.09	69	76	10.1
Polk	13,643	14,666	10.07	1,374	1,477	7.5
Totals	87,355	95,466		1,443	1,553	7.6

Table 4-40. Population Estimates in Subwatershed 06020003130.

Populated Place	County	Population	NUMBER OF HOUSING UNITS			
			Total	Public Sewer	Septic Tank	Other
Benton	Polk	992	397	21	372	4

Table 4-41. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 06020003130.



Figure 4-34. Location of Historical Streamflow Data Collection Sites in Subwatershed 06020003130. More information is provided in Ocoee-Appendix IV.

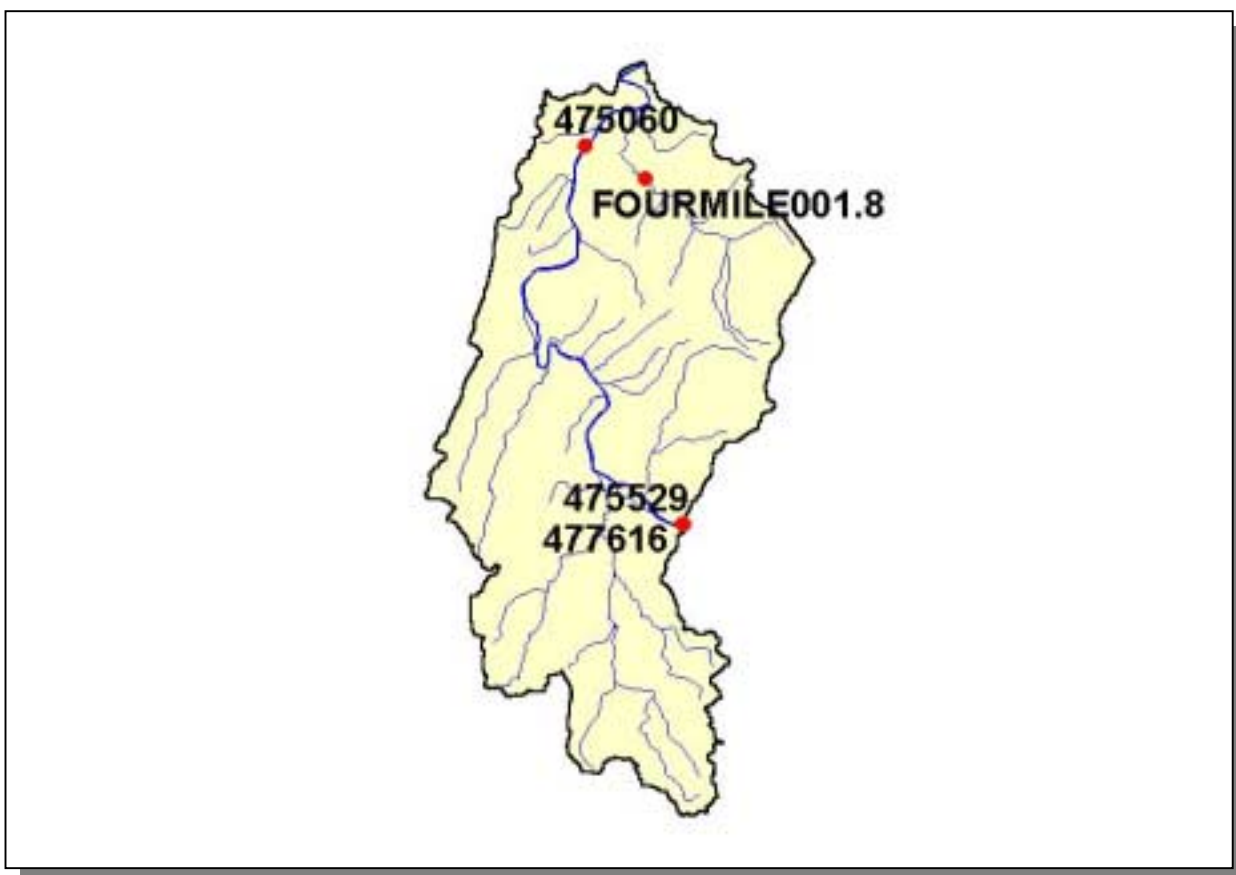


Figure 4-35. Location of STORET Monitoring Sites in Subwatershed 06020003130. More information is provided in Ocoee-Appendix IV.

4.2.F.ii. Point Source Contributions.

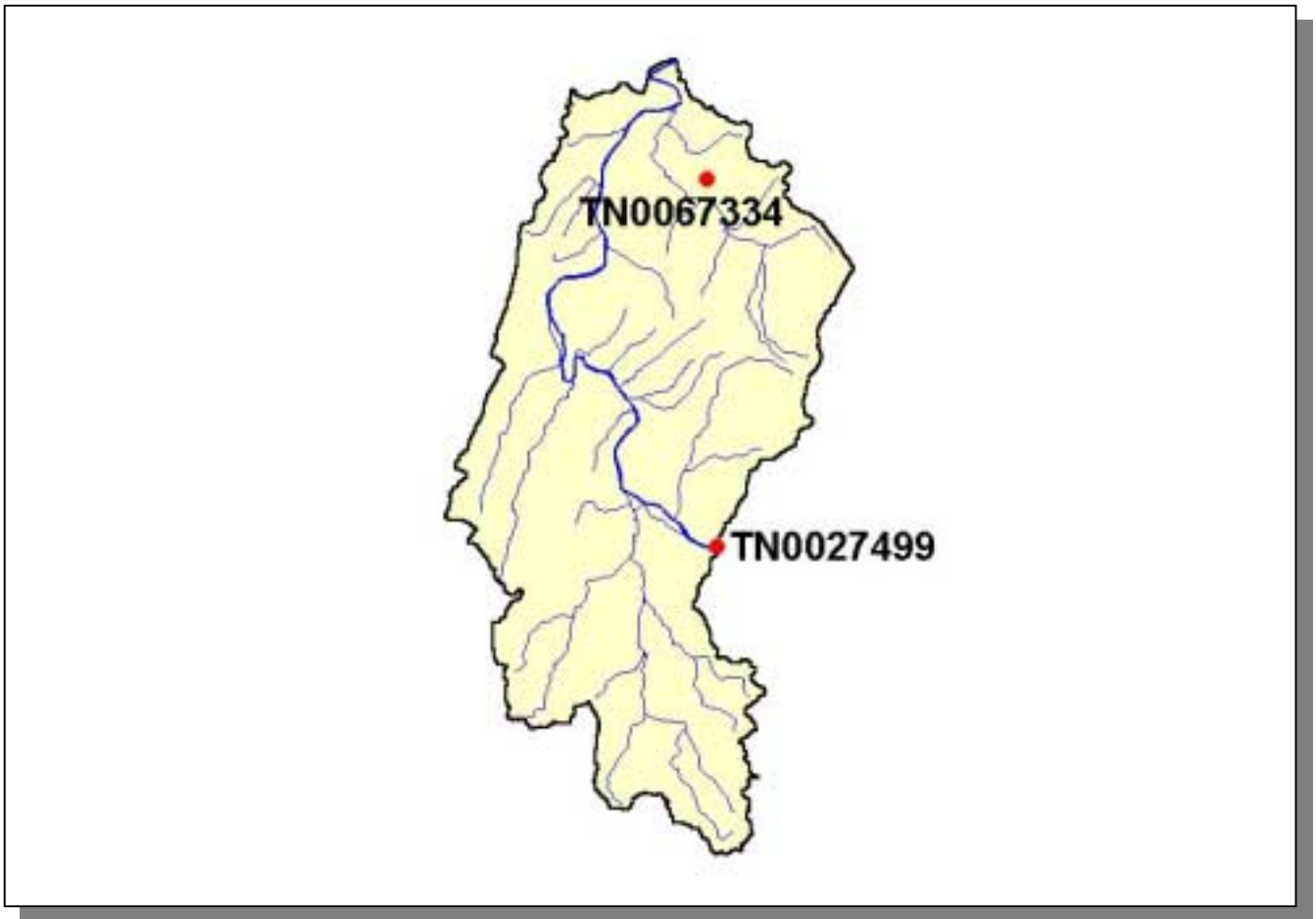


Figure 4-36. Location of Active Point Source Facilities (Individual Permits) in Subwatershed 06020003130. More information, including the names of facilities, is provided in Ocoee-Appendix IV.

4.2.F.ii.a. Dischargers to Waterbodies Listed on the 1998 303(d) List.

There is one NPDES facility discharging to water bodies listed on the 1998 303(d) list in Subwatershed 06020003130:

- TN0027499 discharges to Ocoee River @ RM 12.0



Figure 4-37. Location of NPDES Dischargers to Water Bodies Listed on the 1998 303(d) List in Subwatershed 06020003130. The names of facilities are provided in Ocoee-Appendix IV.

PERMIT #	7Q10	1Q20	30Q2	QLTA
TN0027499	0	0	0	0.3

Table 4-42. Receiving Stream Flow Information for NPDES Dischargers to Waterbodies Listed on the 1998 303(d) List in Subwatershed 06020003130. Data are in million gallons per day (MGD). 30Q2 data were calculated using data in Flow Duration and Low Flows of Tennessee Streams Through 1992.

PERMIT #	METAL
TN0027499	X

Table 4-43. Monitoring Requirements for NPDES Dischargers to Waterbodies Listed on the 1998 303(d) List in Subwatershed 06020003130.

PERMIT #	PCB
TN0027499	X

Table 4-44. Parameters Monitored for Daily Maximum (mg/L) Limits for NPDES Dischargers to Waterbodies Listed on the 1998 303(d) List in Subwatershed 06020003130.

4.2.F.iii. Nonpoint Source Contributions.

LIVESTOCK (COUNTS)						
Beef Cow	Cattle	Milk Cow	Chickens	Chickens Sold	Hogs	Sheep
841	3,052	736	6	2,743,898	<5	<5

Table 4-45. Summary of Livestock Count Estimates in Subwatershed 06020003130. According to the Census of Agriculture, "Cattle" includes heifers, heifer calves, steers, bulls and bull calves.

County	INVENTORY		REMOVAL RATE	
	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Polk	224.7	214.1	6.2	21.1

Table 4-46. Forest Acreage and Average Annual Removal Rates (1987-1994) in Subwatershed 06020003130

CROPS	TONS/ACRE/YEAR
Corn (Row Crops)	6.42
Legume Grass (Hayland)	0.05
Grass (Pastureland)	1.14
Grass, Forbs Legumes (Mixed Pasture)	1.33
Forest Land (Not Grazed)	0.00
Farmsteads and Ranch Headquarters	0.62
Conservation Reserve Program Land	0.27
Grass (Hayland)	0.22
Forest Land (Grazed)	0.00
Non Agricultural Land Use	0.00
Soybeans (Row Crops)	2.33
Fruit (Horticultural)	0.19
Other Cropland not Planted	2.93

Table 4-47. Annual Estimated Total Soil Loss in Subwatershed 06020003130.